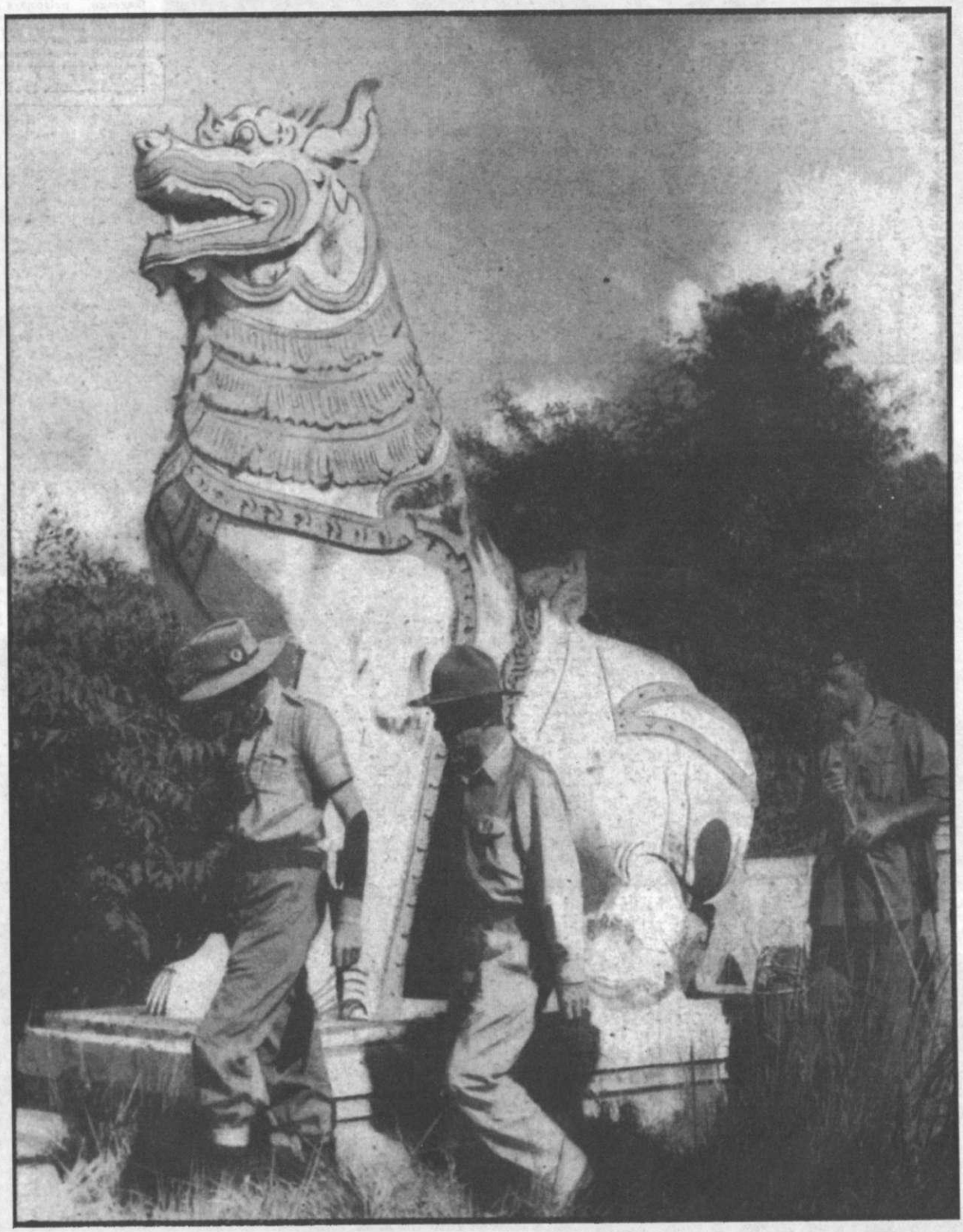
Vol 8 The War Illustrated N° 198

Edited by Sir John Hammerton

SIXPENCE JANUARY 19, 1945

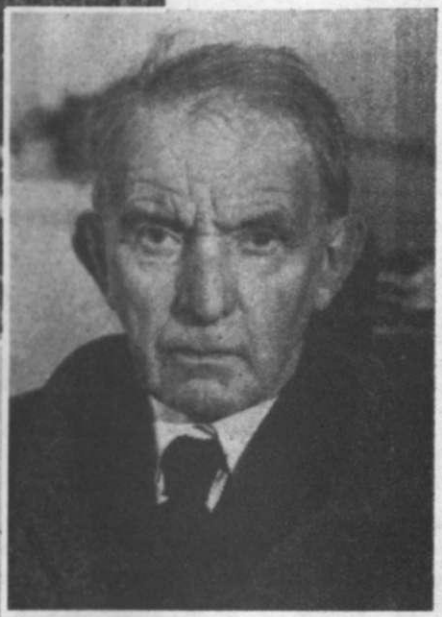


WHENCE THE CHINDITS TOOK THEIR NAME: Major-General F. W. Festing, D.S.O., commanding the 36th British Division (left), and Lieut.-General Dan I. Sultan, the U.S. Commander in Burma (centre), stroll thoughtfully past one of the great Chin Taes at Mawlu in North Burma. These startling guardians of Burmese temples were originally erected to keep away evil spirits. From them the late General Wingate's force (see page 46, Vol. 7) took its undying name. *Photo, British Official*

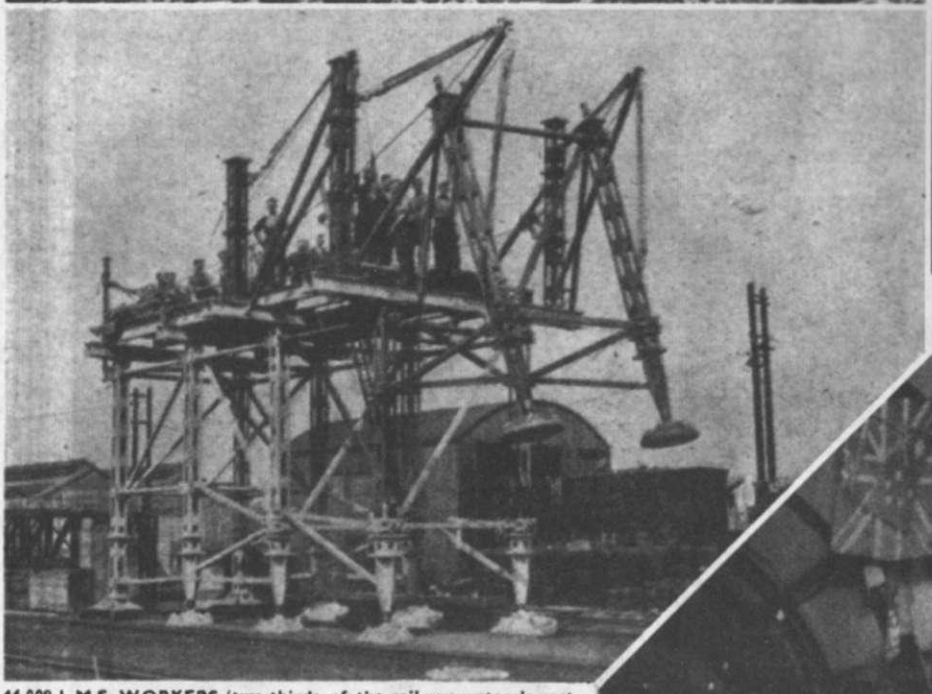
NO. 199 WILL BE PUBLISHED FRIDAY, FEBRUARY 2

Home Scenes Recorded by Our Roving Camera

GERMAN PRISONERS in Norfolk helping to lift the sugar-beet crop under the watchful eyes of a British soldier (left), while a German corporal stands by to pass on the orders. It was announced on December 14, 1944, that small parties of German prisoners were being employed on agricultural and forestry work, without supervision. Their uniform is chocolate-dyed battle-dress, and the maximum pay for this work ranges from 3s. to 6s. a week.



MR. LEWIS J. STURGE 70-years-old barrister (above), appointed Chief Enforcement Officer for the Ministry of Food to wage war against black marketeers.



44,000 L.M.S. WORKERS (two-thirds of the railway system's vast energies) have been building tanks, guns, planes, assault craft, bridges, and armoured trains for the past five years. Troops (above) test a unit construction bridge outside a L.M.S. workshop.

CHRISTMAS COMPETITION was organized by London Transport for the most attractively decorated Tube-station canteens for shelterers. The prizes consisted of War Savings Certificates. The canteen at Gloucester Road, London, S.W. (above) reflects the air of Christmas cheer achieved under tremendous difficulties.

MEN OF THE SERVICES, as well as hundreds of Italian prisoners of war, helped the railway companies to sort out the mails and luggage at the great London termini during the holiday rush at Christmastide. British troops (left) amid the welter of mailbags at Waterloo. *Photos, Daily Express, Topical Press, Fox Photos*

THE BATTLE FRONTS

by Maj.-Gen. Sir Charles Gwynn, K.C.B., D.S.O.

WHEN I last wrote it was well known that the Germans had during the autumn been able to form a powerful reserve with a large armoured component, and that it was located in the Cologne region.

The Allied High Command apparently considered that it was intended for use in a defensive counter-stroke in case the west wall was breached. They presumably thought that Von Rundstedt, in view of Allied air superiority, would not dare to undertake a counter-offensive operation which, if it achieved any success, must involve a lengthening of his lines of communication and an advance out of the area in which he possessed well fortified defensive pivots.

The prospects of such a counter-offensive achieving anything of decisive importance would be small and the risks of ultimate disastrous defeat very great. It is not, therefore, astonishing that Von Rundstedt secured surprise as good generals have often done, by accepting apparently prohibitive risks. Surprise gave him the initiative and initial success, but it remains to be seen whether he has not followed a will o' the wisp. The situation while I write is still too fluid to justify any attempt to forecast the outcome, although personally I have never wavered in the belief that Von Rundstedt's success, such as it has been, would be short lived. I considered that the utmost he would achieve would be to disorganize and delay General Eisenhower's offensive preparations and thus gain a breathing time on the western front before the main Russian offensive started.

RESERVES Thrown Piecemeal Into Battle in a Defensive Role

The risks he ran of being caught on the rebound were, however, obviously very great if he attempted too much, especially in view of Allied air superiority which would test German skill in disengaging to a dangerous degree. I cannot believe that Von Rundstedt seriously hoped that he would succeed in disrupting the Allied front and reach Paris or Antwerp; although to stimulate his troops he may have announced that these were his objectives. It should, I think, be noted that the battle has been mainly between the reserves on both sides.

The greater part of both armies face each other on a long stabilized front (see map), and there are not, in the faster moving operations of today, the same opportunities of applying the "roulement" system used extensively in the last war to maintain a long drawn out struggle such as the Somme and Passchendaele. By taking the initiative Von Rundstedt was able to complete the concentration of his reserves before striking his blow, while, on the other hand, the numerically superior Allied reserves were widely dispersed and had to carry out much regrouping before they could deliver an effective counter-blow. Some had of necessity to be thrown into the battle piecemeal in a defensive role.

VON RUNDSTEDT's plans were skilfully laid and executed, but were adapted to gain initial and temporary rather than major success; for with the bulk of the German Army tied to Russia he has not the force behind him—as he had in 1940—required to achieve anything of a decisive character. It is, in fact, surprising that, with the Allied air arm grounded by fog, his thrust so quickly lost its momentum, and for that we have to thank the very gallant resistance offered by the American troops, even when isolated and fighting under most trying conditions. The climax of the battle has not yet been reached at the time I write, for Von Rundstedt still has fresh reserves uncommitted and may be able to regroup those partly expended for an attempt to recover the momentum of his drive before the Allied reserves can be brought fully into action. There can be no doubt, however, that he put his best troops and greatest strength into his opening effort, and that the Allies were then at their weakest. The chances that a second blow might succeed when the first has failed must therefore on all accounts be small. It would be a gambler's bid which, if it failed, might well shorten the war, but that consideration would not, I think, as I have before suggested, deter Von Rundstedt. (See map, p. 549.)

HUNGARY Meanwhile, in Hungary the German situation has rapidly deteriorated and Tolbukhin has added another great achievement to his remarkable record. When the Germans decided to hold Budapest at all costs they must have been confident that they would be able to keep communications with the city open. They had established and strongly entrenched a position stretching from the north end of Lake Balaton to the Danube, which could not be outflanked. Good lateral communications also facilitated the movement of reserves to meet any danger of penetration by frontal attack, and the large town of Szekesfehervar provided a strong defensive pivot in its centre. Provided the position held, communications with Budapest were amply assured; and the fact that Tolbukhin's Army was split in two by Lake Balaton and that its communications not only were of great length but had to pass through a bottle-neck at the Danube crossing, seemed to make it improbable that he could achieve a break-through.

WESTERN FRONT after the Allied armies had stemmed Rundstedt's violent counter-offensive launched on December 16, 1944, and U.S. troops of the 1st Army encircled at Bastogne had been relieved on December 27 by U.S. 3rd Army forces. *By courtesy of The Times*

IT is true Malinovsky had secured a crossing of the Danube south of Budapest, but with his army engaged in widespread operations to the east and north of the river it was unlikely that he could give Tolbukhin much direct support. By maintaining pressure on Pest he had immobilized a number of enemy divisions in defence of the city; but decisive and rapid success depended on Tolbukhin's ability to break through the strong flank position, and it is clear that he displayed generalship of a very high order in accomplishing the feat. By vigorous feint attacks and concealment of his main striking force he succeeded in misleading the enemy and achieving surprise. Under cover of a sudden concentrated bombardment his infantry broke through and his armour followed, fanning out and widening the gap.

Thrown into confusion, part of the German force appears to have retired into Budapest, and Szekesfehervar was taken with astonishing rapidity. As on former occasions it was, however, the speed and boldness with which Tolbukhin employed his armour to exploit success that made the whole operation decisively complete. Driving north it not only cut the roads and railways leading into the capital, but it reached the Danube, making contact with Malinovsky's troops on the north bank of the river. The city was thus completely encircled and no time was lost in widening and strengthening the ring against any attempt of the garrison to break out to the west, or attempts by a relief force to re-establish communication with it. The garrison had no alternative but to stand a siege. Tolbukhin may attempt to carry Buda, on the west bank of the river, by storm, for he has already occupied the suburbs and defences are probably not well organized to stand an unexpected attack from the rear.

OUTMANOEUVRED and Outfought by Malinovsky and Tolbukhin

Pest, on the other bank, is, however, still strongly held and the garrison should be able to put up a stubborn defence. In that case, although the communications leading through the city would be invaluable to them, the Russians may be content to invest the place and concentrate their efforts on a drive westwards towards Bratislava and Vienna, Malinovsky on the north and Tolbukhin on the south bank of the Danube. The Russians have shown before now that they are not easily diverted from their main object by a tempting bait. Much may, however, depend on the attitude of the Hungarian troops who probably furnish a considerable part of the force in Pest. They might not offer much resistance to an attempt to storm the city which would have devastating effects.

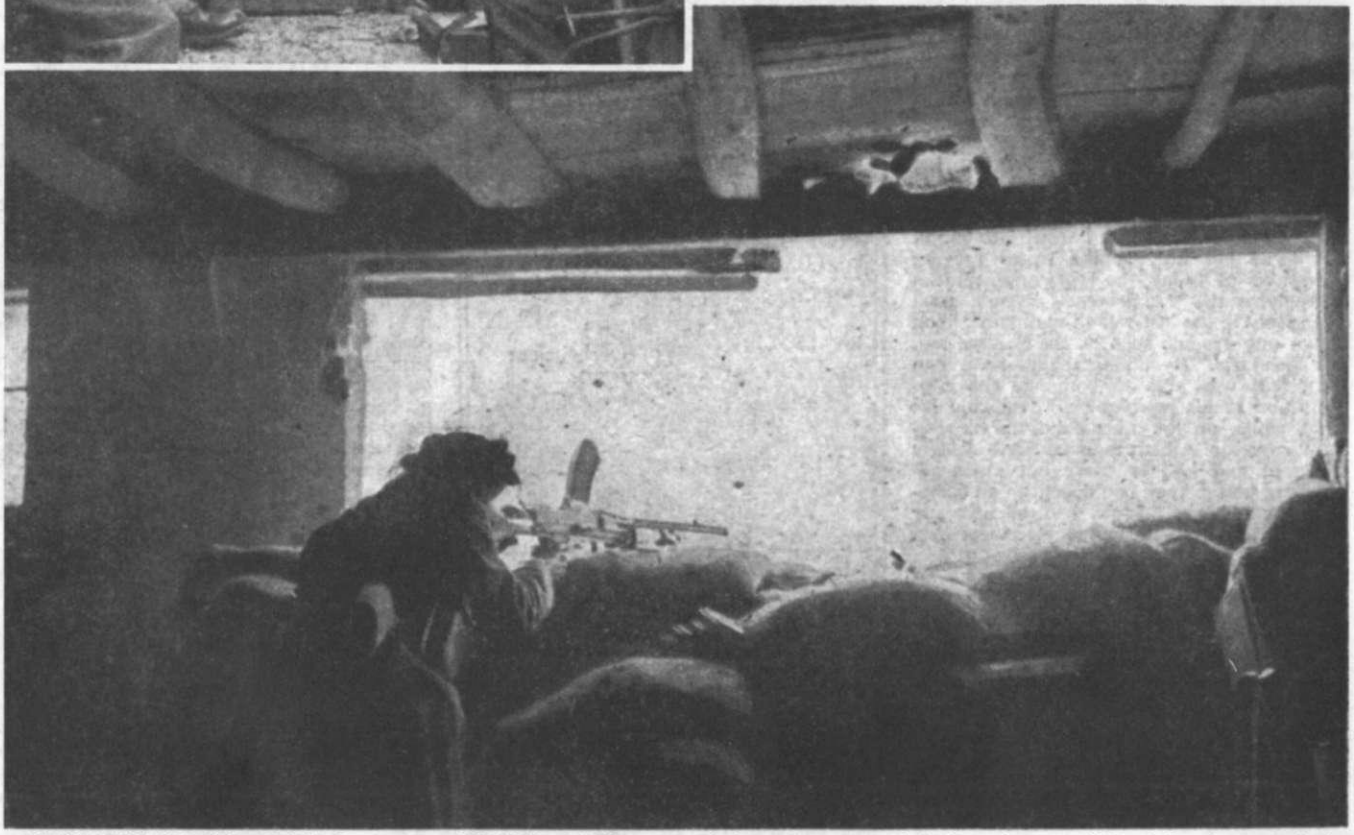
In any case the mere isolation of so large a force in the capital is bound to have a far-reaching effect on the whole situation in Hungary. The troops which failed to hold Szekesfehervar must need much reorganization before they become again an effective force. They are, moreover, in danger of being cut off from all communication with those opposing Malinovsky on the north side of the Danube, and they are not likely to receive much reinforcement from those facing Tolbukhin's left wing south of Lake Balaton.

Seldom have the Germans been so completely outmanoeuvred as well as outfought, and on this occasion I do not think that the disaster can be attributed to Hitler's obstinate determination to hold on to untenable positions at all costs. (See map, p. 553.)

All Wet and Quiet on British 2nd Army Front—

VOYAGE BY ASSAULT-CRAFT was the only means of transport available to these infantrymen of the British 2nd Army holding the "Island"—the flooded tract of land north of Nijmegen on the road to Arnhem.

GRIM WARNING ON XMAS DAY faced these men at a street crossing swept by enemy fire. Luck of the draw decided which of these troops (left), should go on leave, beginning January 1, 1945.



ACROSS THE FLOODS a British Bren-gunner of Field-Marshal Montgomery's forces keeps a steady look-out from an old Dutch farmhouse stacked high with sandbags. Towards the end of December 1944 enemy patrols were reported to be operating along the banks of the Maas by night, trying to edge silently along the canal into our positions—only to be dispersed. The U.S. 1st and 9th Armies were placed under Montgomery shortly after the Rundstedt offensive began (see facing page)

Photos, British Official, British Newspaper Pool

—As Rundstedt Struck Savagely Farther South

CLOSING DAYS OF 1944 witnessed a full-scale German counter-offensive, deeply penetrating the frontiers of Luxembourg and Belgium, notably in the Ardennes (see page 569). This map shows the front on December 28, when General Patton's 3rd Army, mightily counter-attacking, had narrowed the "bulge" north of Bastogne. The enemy was also held at Celles and Ciney, four miles from the Meuse.

U.S. FIELD ARTILLERYMEN hurriedly manhandle their guns into fresh positions in the early stages of Von Rundstedt's powerful counter-offensive launched on December 16, 1944. Fourteen days later Gen. Patton's U.S. 3rd Army went over to the offensive on a 35-miles front. American machine-gunners (below) cover a front-line bridge.

"GIVE YOUR ALL IN ONE LAST EFFORT!" was Field-Marshal von Rundstedt's order to his troops assaulting the U.S. 1st. Army in the west. Among his heavy supporting armament were the new Royal Tiger tanks, one of which is seen here knocked out during the U.S. 1st Army's recapture of the Belgian town of La Glieze. The Royal (or "King") Tiger is reputed to mount a 105-mm. gun, to have front armour a foot thick and to weigh over 70 tons. Note the exceptionally wide tracks.

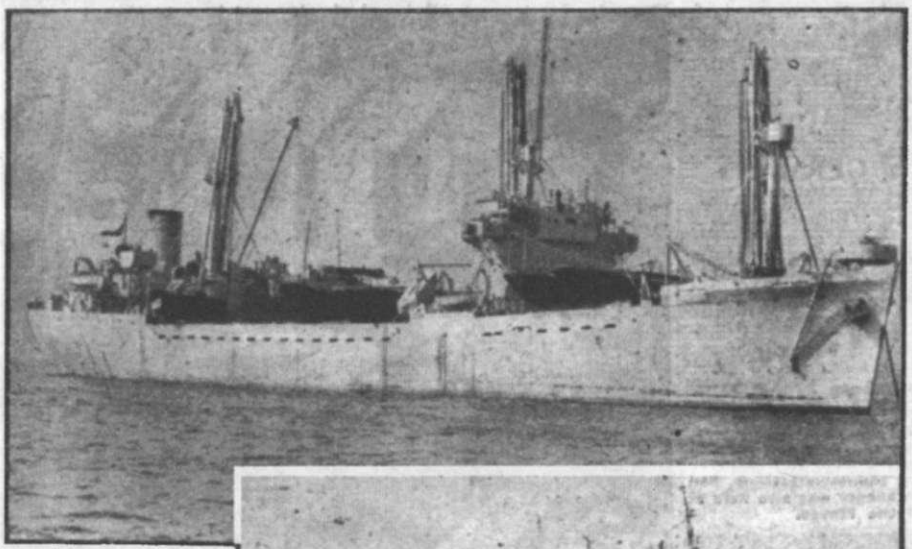
Photos, U.S. Official, Planet News, Keystone. Map, News Chronicle

THE WAR AT SEA

by Francis E. McMurtrie

In a speech at Sydney, Admiral Sir Bruce Fraser, Commander-in-Chief of the British fleet in the Pacific, has hinted that there will be some surprises for the Japanese at sea as the year advances. A leading part was promised for the Fleet Air Arm, which would be called upon to meet the attacks of Japanese shore-based aircraft, thus neutralizing the enemy's airfields and covering troop landings.

How successfully this can be done is illustrated by the progress of the American invasion of the Philippines. By the end of last year practically all resistance had ended in the island of Leyte, where a total of 117,997 Japanese troops had been disposed of, equivalent to a complete army. Mastery of the air has been an essential feature of the reconquest of Leyte and Mindoro. It has been achieved by means of an overwhelming force of aircraft carriers. The total number of these in service in the United States Navy at the end of 1944 was 124, comprising 15 of the 27,000-ton Essex class; eight of the 11,000-ton Independence class; the Saratoga, Enterprise and Ranger, all built before the war, and no fewer than 98 escort carriers. Since it may be assumed that the bulk of this formidable fleet of carriers is employed in the Pacific, it follows that the U.S. fleet there is able to put into the air when desired some thousands of aircraft. It is not surprising, therefore, that Japanese air losses have been extremely heavy.



SHIP-CARRYING SHIP might be the description of this fast new military cargo vessel (above), built in Britain. Equipment includes three 120-ton derricks. Note the smaller craft rising above her holds, fore and amidships.

Assembled and launched within 4½ days are Britain's new "Tid" tugs (right), "Tid" being short for "Tiddler." Prefabricated, the components are assembled in shipyards. The engines develop 1,000 h.p.

Photos, British Official

Admiral Fraser observed that he did not rule out the possibility of an ultimate clash between Allied capital ships and the enemy's, though it might be assumed that Japanese tactics would be to hold back their fleet until the fullest possible air cover could be provided by shore-based planes. This would necessarily imply the postponement of any fleet action until the mainland of Japan is threatened by invasion or blockade.

American estimates of the strength remaining to the Japanese Navy vary. According to one commentator, there may still be from eight to ten capital ships in fighting condition. This probably is slightly exaggerated, and has been arrived at by taking into account either new 45,000-ton battleships which have still to be completed, or the nebulous and probably mythical ships of a glorified "pocket battleship" design, supposed to be under construction when war began.

There is no evidence that any new battleships have been completed other than the Musasi and Yamato, which took part in the Battle of the Philippines last October. A third of the class may be nearing completion, in which case she may have to be reckoned with some time in 1945. The only other battleships are the Nagato, Hyuga, Ise, Haruna and Kongo, and there is a possibility that one of these may have foundered as a result of severe damage received in the Battle of the Philippines. The Hyuga and Ise have both been fitted with flight decks aft, so are probably no longer in a position to use the whole of their armaments. What has become of the Mutu, sister ship of the Nagato, is doubtful. She did not figure in the Philippines action, when every other known Japanese capital ship was thrown in, and it is suspected that she no longer exists.

It would be more accurate, therefore, to estimate the enemy's capital ship strength at six or seven units. Such a force has little hope of making headway against the weight which the Allied fleets in the Pacific are capable of bringing to bear.

Excluding the obsolescent New York, Texas and Arkansas, the U.S. Navy now possesses 20 efficient battleships, ten of which have been completed since 1940. This calculation does not include the Arizona and Oklahoma, neither of which was found worth rebuilding after the shattering damage received when they were sunk at Pearl Harbour three years ago.

No information has been released concerning the composition of the British fleet in the Pacific, beyond the fact that the battleship Howe is Sir Bruce Fraser's flagship. (See illus. pp. 560 and 561). It has, however, been intimated that the new ship launched by Princess Elizabeth on November 30 last—which according to a German broadcast is the 45,000-ton battleship Vanguard—will be ready in time for the war against Japan.

These two facts apart, it seems reasonable to conclude that all the modern capital ships in the Royal Navy will ultimately proceed to the Pacific. In addition to the possible use of the Vanguard, these would include the Howe, Anson, King George V, and Duke of York, and presumably the Nelson and Rodney. It is also gathered from what has been published in the Press that the modern French battleship Richelieu has been assigned to the Pacific theatre, making the British fleet's potential battleship strength up to eight.

Battleship Superiority Over Japanese will be Approximately Four to One

Thus it would appear that the Allies will be in a position to muster a possible total of 28 battleships against the Japanese, giving them a superiority of about four to one. How different from the bright prospect that seemed to be opening for Japan at the end of 1941! United States battleship strength was then temporarily reduced to half-a-dozen modern and undamaged units, one of which was under refit, against ten Japanese battleships in full commission and two more nearing delivery. At that date, too, this country had no modern capital ships available for service outside European waters.

It may be argued that Japanese strategy was faulty, in that the spectacular success at Pearl Harbour was not followed up quickly by a landing in the Hawaiian group. If the efforts directed against Burma and the Netherlands Indies had been postponed while Hawaii was overrun, the task of the United States in recovering from the Pearl Harbour disaster would have been immeasurably more difficult. The battleships Nevada, California, Tennessee and West Virginia could not have been salved and repaired, as they were during 1942-43, and American strength would have been reduced by four important units; while the loss of Pearl Harbour would have been a tremendous handicap.

It would seem as though, too late, the Japanese began to appreciate these facts. At any rate, it is generally believed that the large force of transports and warships which was intercepted and broken up by American air attack in the Battle of Midway, before it had got as far as that island, was intended to operate against Hawaii. By that time six months had elapsed, and the chances of the enemy succeeding in such a distant enterprise were considerably reduced; but it still represented a serious menace, and its defeat is rightly regarded as the turning point of the Pacific war.

Today the prospects for Japan are distinctly gloomy. Her ally in Europe is losing strength daily, and at sea has been reduced to a feeble defensive. Of late the only naval activity by the Germans has been in the shape of night raids by small craft, in which their losses have been heavy, and the use of "secret weapons" such as midget submarines and human torpedoes (see page 551). Though these may be useful as propaganda to bolster up the morale of the home front, they have achieved nothing of practical value.

Fantastic Nazi Frog-Men and Human Torpedoes

SPECIALLY TRAINED NAZI SABOTEUR-SWIMMERS in rubber tights, with frog-like webbed feet and oxygen masks, swam six miles down the River Waal on September 29, 1944, only to be captured by British troops after an attempt to blow up the Nijmegen Bridge. A net (1) camouflages the swimmer's face. Returning from action (2) he is hauled aboard an escape-craft. Fully-equipped (5), he poses for the camera. Other new enemy naval weapons are the one-man torpedo (3), and light craft with explosive charges (4).

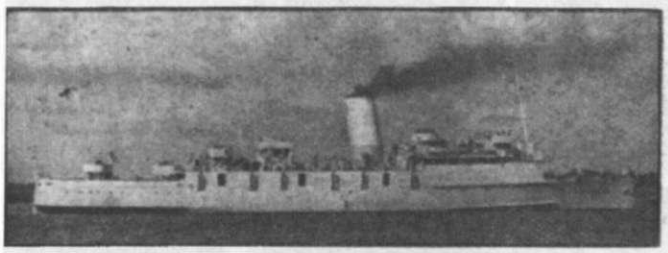
Photos, Associated Press, Keystone

Troopships That Never Fail the Battle-Lines

Behind official totals of Allied troops successfully carried over the seas are many half-divulged stories of brilliant achievements of troopships by the hundred. All types and sizes of vessels are these, from the 80,000-ton peacetime luxury liner turned war-worker to the humdrum little steamer of the trippers' holiday. Something of the superb romance of these adventurous ships is outlined below by MARK PRIESTLEY.

UP to the end of September 1944, 10,600,000 British Army personnel had been moved by sea—with the loss of 2,978 lives, or only 0028 per cent of the total. In just over three months from D-Day (June 6) more than 2,200,000 men were landed in France and the Low Countries; and even the loss of stores due to enemy action totalled a mere three-fifths of one per cent of all stores landed !

Anyone who saw the Canadian assault troops streaming from the Canterbury into the landing craft off the Normandy beaches will never forget the spectacle. Since then, under the command of Capt. G. D. Walker, D.S.O., this famous peacetime steamship of the Dover-Calais luxury run has been foremost in the shuttle service between Britain and the forward European ports. Down in the engine-room, the Chief Engineer, Mr. Stanley Belchamber, has an amazing record. He was with the first ship to land troops in France in 1914, and with the first ship to land troops in 1939. "I had hoped to repeat it in 1944," he said, "but we lost by four seconds."



PEACETIME LUXURY VESSEL, the S.S. Canterbury, known to thousands on the Dover-Calais route and here seen in "battle-dress," has won new fame as a troop transport. Built in 1924 and with a tonnage of 2,900, her speed is 22 knots. *Photo, Southern Railway*

That is typical of the magnificent seamanship that has conducted the transport of our men with such safety and success. The first Allied landing on European soil, the operation against Sicily, was headed by Captain M. H. Williams, a ship's master with a record of 44 years at sea. He had trained for weeks beforehand, off a remote stretch of British coastline, to make sure that the high-spot of his voyage would be perfect.

One famous troopship, the Royal Ulsterman, has scarcely paused for four years in her specialized work of carrying troops to and from Iceland, to the Gold Coast and South Africa, to Madagascar, Italy and France. Her sister ship, the Royal Scotsman, which has steamed 50,000 miles since the evacuation of Narvik in 1940, once sailed from Malta to Bombay and back, a remarkable operation for a vessel primarily intended for a peacetime coastal run.

Then there is the Ben-My-Chree (Girl o' My Heart), once on the Liverpool-Douglas "tripper line," and now with a record of 100,000 miles safely behind her. Her skipper, Capt. Radcliffe Duggan, has been 53 years at sea, and was the Dunkirk hero who deliberately steamed four miles through a minefield as the lesser risk to his passengers than sailing past a line of enemy batteries which had plastered his ship on the way in. Since then he has undertaken round trips of 2,700 miles through Atlantic winter gales to serve the Iceland garrison, and he finds the present-day routine service to Europe "almost monotonous."

Her best voyage was undoubtedly the recent occasion when she re-entered Cherbourg harbour, for she had been the first ship to enter that port, carrying 1,400 French reservists, on September 4, 1939. Her worst voyage was, strangely enough, one she made without a soldier on board. It occurred en route to her refitting as a first-wave assault ship, when during a storm she was caught in the millrace off the Pentland Firth, off the north tip of Scotland. Waves twenty feet high crashed over her stern, and hundreds of tons of water swept through the lower decks, sweeping away everything movable in their path. None on board thought she could survive, but she came through.

THE Royal Scotsman once ran into a sandstorm at sea; it whipped the paint off the weather-side of the ship, and in 48 hours worked its way so thoroughly into the guns that they had to be completely stripped and cleaned. The Prins Albert, formerly a passenger ship on the Ostend run, has had many narrow escapes, but has never been hit and has never missed a landing. At Salerno she was singled out for attack by seven E-boats, and a torpedo missed her by two feet. "Aircraft were overhead, we were firing, our destroyer escort was firing, the Erebus was smacking 15-in salvos into the shore batteries which were firing as well—it was some party !" one of her officers said.

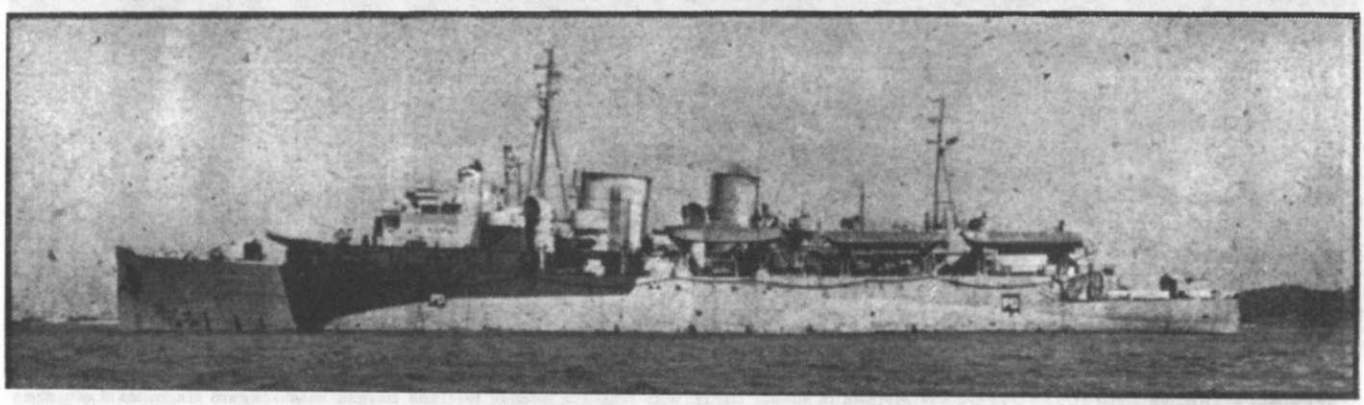
A troopship, with the reputation of being Britain's luckiest, was actually landing troops in Italy when the enemy reported her as sunk in the South Atlantic; and when she recently put into Gibraltar it was with a trail of four doomed U-boats bagged by the destroyers in her wake. She once reached Gibraltar without a rudder, and the officers decided to run her without passengers and with a volunteer crew back to England. She hugged the occupied coast safely across the Bay of Biscay, but was sighted by a U-boat when 30 miles from Brest. The fog that suddenly swept down and saved her was typical of her luck. Twice raided when in port, every bomb fell wide and the rudder was repaired. When she sailed again, a 12-in. shell amidships damaged her only slightly. Subsequently involved in a collision, she was sailing again within a few weeks, and now carries troops to within 60 miles of Germany.

Four Invasions in Five Months

The Manxmaid, brought back into active service a couple of years ago after running thousands of aliens to the Isle of Man, for some months acted as the German battleship Tirpitz while our planes were training for the real attack !

No record of the "troopers" would be complete without mention of the Canadian landing ship Prince David, which possesses the proud distinction of having been in four invasions in five months. She lost every assault craft sent to the beaches of Normandy. She was in time, however, to land the French Commandos seven hours before the main assault on Southern France. For nearly two miles on the way in they travelled on a parallel course to some light German craft, but the Prince David was not seen. Then, on the way out, she found herself the centre of a mêlée between Allied warships and a batch of Nazi corvettes; once again she escaped. Three weeks later came her support to the landings on Kithera, an island off the tip of Greece. That was followed by her arrival at Piraeus, the port of Athens. The Greeks came out to meet the David's flotilla, in everything that would float—from schooners to tin bath-tubs.

THE goliaths of the British troopships are the Queen Elizabeth and Queen Mary, luxury liners converted to war-work. The 80,000-ton Queen Mary (see illus. page 486), with a good turn of speed on two occasions ploughed unharmed through a pack of 20 U-boats. In the first three years of this war she made six voyages to Australia, and took thousands of Australian troops to the Middle East and Singapore—and, by way of a change, she has carried large numbers of Italian and German prisoners to captivity.



OUTSTANDING AMONG THE HIGH ENDEAVOURS of the Empire's war effort have been the achievements of our troop-transports. Characteristic example is the fine record of the Royal Canadian armed merchant cruiser Prince David, built at Birkenhead in 1930. With a displacement of 7,000 tons, she carries a complement of 241. Sister ship of H.M.C.S. Prince Henry, her speed is 24 knots. PAGE 552 *Photo, Royal Canadian Navy*

Two Irresistible Soviet Armies Encircle Budapest

SWEEPING WESTWARDS, the 2nd and 3rd Ukrainian fronts of the Red Army had completely encircled Budapest (see map) by December 26, 1941. Four days later the enemy rejected a Soviet ultimatum, and fierce house-to-house fighting immediately ensued in the suburbs. Soviet tanks close in (1) on the Hungarian capital. Russian gunners open fire (2) at point-blank range. A Red Army tank is replenished with water from the Danube (3); while horsed artillery units (4) dash into action.

Photos, U.S.S.R. Official, Pictorial Press. Map by courtesy of The Times

McCreery's Die-Hards Take Faenza in Italy

FAENZA—ITALIAN KEY-TOWN—was captured on December 16, 1944, by British, Canadian, New Zealand, Indian and Polish troops of the 8th Army fighting in close co-operation (see map). Before the final push, Lt.-Gen. Sir Richard McCreery, 8th Army Commander, visited British sappers (1, centre) on a demolition job. New Zealanders in a jeep (2) were bogged down in the seas of mud, while their fellow countrymen (3) entered the town. Sexton self-propelled guns (4) harassed the enemy north of Ravenna

 Photos, British Official. Map, The Times

Political Prisoners Dash From Alsace Gaol

DELIRIOUS WITH JOY at their unexpected liberation, these French women political prisoners rushed from Haguenau prison in Alsace where 300 of them had been incarcerated by the Nazis. When Haguenau, last important town before the German border, was taken by the U.S. 7th Army on December 11, 1944, the Germans were so eager to quit that they forgot the prisoners. Some of the latter had been held for two years, their "crimes" ranging from making insulting remarks about Hitler to listening to the B.B.C.

Photo, Keystone

Miracle of South-East Asia Air Command

Lack of planes, airfields, constructional and repair organizations and personnel, plus enormous distances from supply ports, grievously handicapped us in the early days of the war against Japan. Now, air backing for Allied operations in South-East Asia has reached mighty proportions. Its development in the past two years is traced by Squadron-Leader DEREK ADKINS.

When war was declared in September 1939 urgent operational requirements in other theatres made it impossible to reinforce or modernize the pre-war air force in India, although the need did not really arise until Japan entered the war in 1941. Up to that time the Royal Navy had protected India's 3,000-mile coastline from seaborne attack, and her armies had defended her land frontiers and maintained internal peace.

When Air Chief Marshal Sir Richard Peirse arrived in India at the beginning of March 1942 he found no more than four Royal Air Force squadrons, whose most modern aircraft were a handful of Mohawks, and three Indian Air Force squadrons of out-of-date Harts and Lysanders.

In Burma the situation was little better. There were four fighter, three bomber and two Army Co-operation squadrons, but they lacked proper repair or maintenance-organization and their warning system consisted of inadequate observer posts. The result was that, in spite of their own gallant efforts and those of the American Volunteer Group, the Japanese advance could not be halted. These squadrons, sadly depleted in equipment and personnel, were forced to retreat with the Army into Indian territory.

In Ceylon there was little reason for confidence, but capable improvisation enabled fighters to operate in the nick of time and beat off enemy naval bombers dispatched from the Japanese battle fleet on Easter Sunday (April 5) 1942. No further attacks were launched against either Ceylon or India before the 1942 monsoon, which gave time for the position to be consolidated.

The chief problem was the lack of airfields suitable for modern operational aircraft. A hugh priority programme was planned which aimed at multiplying the number of airfields more than fifteenfold at a cost of over £15,000,000. In spite of the shortage of suitable constructional equipment and supervisory staff (the bulk of the labour being carried out manually by coolies), well over 200 airfields in India and Ceylon were available to the British and American air forces before the end of 1943.

A second difficulty was to build up an adequate maintenance system in a country where heavy industries are practically non-existent and the number of highly trained Indian workmen consequently small. The enormous distances from the ports at which supplies arrived to the scene of operations in Assam and Bengal imposed additional burdens on a railway system already strained to the limit by existing war commitments. Nevertheless, by the end of 1943 a civilian repair organization had been started, and several civilian maintenance units had begun operating under the supervision and guidance of a small nucleus of Service personnel. Storage space expanded 33 times, and the rapidity and efficiency of the expansion can be judged by the fact that compared with the average output of the first six months of 1943 nearly four times as many aircraft were in fact erected during the whole of that year.

The third problem was that of personnel. The small drafts that became available from the United Kingdom and other theatres were insufficient to meet the growing man-power needs in South-East Asia. The Indian Air Force was therefore increased to ten times its previous strength, and training organized in every trade and flying category. Many thousands of young Indians came forward to join India's youngest fighting service, and are today playing their part beside the Royal Air Force and the U.S. Army Air Force in the war against Japan.

The need for the safe conduct of the convoys bringing men and supplies and equipment to India resulted in the development of an organization designed to fulfil over the Indian Ocean the responsibilities of Coastal Command over the sea approaches to Great Britain. From a small beginning there are now numerous medium and long-range general reconnaissance squadrons regularly patrolling the sea lanes from the coasts of Africa, the Persian Gulf and the Sea of Oman, to the shores of India and Ceylon and as far east as the Japanese occupied islands of Andaman, Nicobar and the Netherlands East Indies.

AIR CHIEF MARSHAL Sir Richard Peirse, K.C.B., D.S.O., A.F.C., Allied Air Commander-in-Chief, South-East Asia Command, the exploits of which, since 1942, are related in this page. *After the portrait by Simon Elwes*

The main theatre of operations, however, has been India and Burma, the bulk of the squadrons being located in Bengal and Assam. After night fighters had dealt sternly with random raiders attacking Calcutta in January 1943, offensive operations began in the spring. Although the Army had failed in its objective of securing forward positions in the Arakan and holding them during the 1943 monsoon, air supremacy was maintained throughout the fighting and direct support given to the troops. In addition, bombers and long-range fighters had vigorously attacked enemy airfields and dislocated his rail, road and river lines of communication.

With the advent of the monsoon in June 1943 the Japanese almost entirely stopped air operations and withdrew their units for training, rest and re-equipment. Despite the weather, however, Allied air operations were continued against the enemy in order that his communications and reinforcement activities should be disrupted as much as possible. These hazardous operations met with such success that the Japanese were forced to move the bulk of their supplies and troops by night. The intensification of operations that took place after the 1943 monsoon was made doubly effective by the reorganization of the air forces, resulting in the formation, in December 1943, of Air Command, South-East Asia, with Air Chief Marshal Sir Richard Peirse as the Allied Air Commander-in-Chief under the direction of the Supreme Commander, Admiral Lord Louis Mountbatten.

Responsibility for the prosecution of the air war against Japan from Eastern India was vested in the new Eastern Air Command, of which the American Major-Gen. George E. Stratemeyer became Air Commander. This Command is staffed jointly by British and American officers and controls all R.A.F. and U.S.A.A.F. squadrons based in Assam and Bengal (see facing page).

Under Eastern Air Command there are four integrated forces—the Strategic Air Force, the Third Tactical Air Force, Troop Carrier Command and the Photographic Reconnaissance Force. The general reorganization was implemented by modern aircraft, notably Spitfires, Beaufighters, Vengeance dive-bombers, Mosquitoes, Liberators and Thunderbolts (see illus. page 508).

It may be said that the introduction of the Spitfire to the Third Tactical Air Force proved a turning-point in the air war against Japan, for previously Hurricanes had struggled against enemy aircraft that usually possessed the advantages of height and manoeuvrability.

The medium and heavy bombers, however, have been the main offensive weapon. Throughout a campaign that was for so long fought largely on a strategic defensive by all three Services, these aircraft have been the arm that has reached forward to strike. The tenuous communications that exist throughout Assam and Burma have laid so many duties on the R.A.F. Dakotas of Troop Carrier Command that they have now become as indispensable as the fighters and bombers to the success of ground operations.

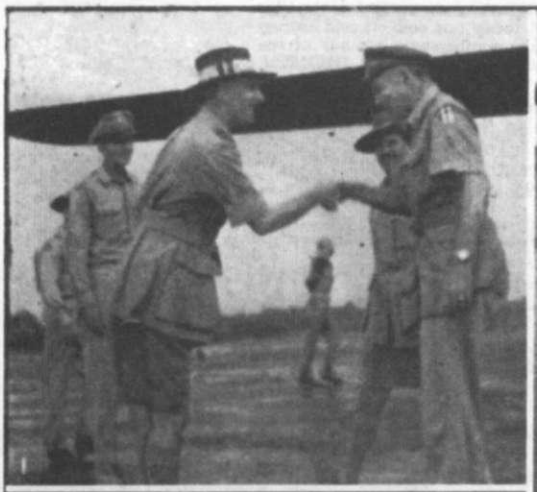
Air supply, too, has been one of the deciding factors in the work of the 14th Army. The 7th Indian Division, for example, was wholly dependent for food, ammunition and fuel on supplies dropped from the air, when isolated in Arakan in February 1944. The West African Brigade, fighting in the Kaladan valley and cut off by rivers and mountain ranges, was supplied almost entirely by air, and the 5th Indian Division, including thousands of men, hundreds of animals and jeeps and all the Divisional artillery, was transferred by air from the Arakan to the Imphal front in March 1944.

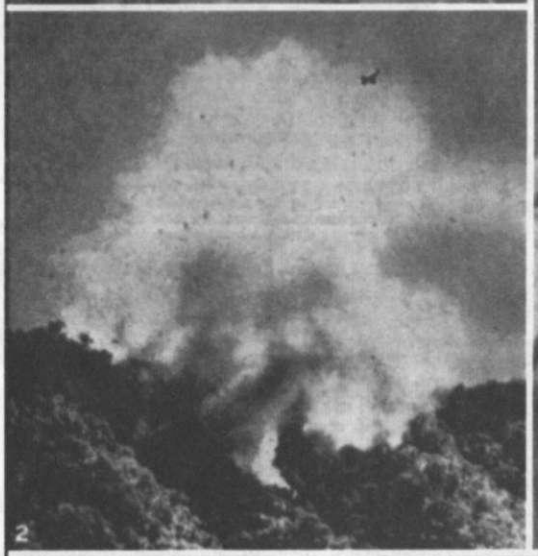
In Imphal itself British and U.S. Dakota squadrons, flying unarmed, successfully accomplished the biggest air supply feat of the war. For three months they maintained and reinforced over four divisions of our troops who were in full action against a completely surrounding enemy. Such was our air supremacy that we lost under 20 planes. The fly-in of the late General Wingate's forces (the Chindits) behind the Japanese lines was another outstanding feat of 1944.

The Mosquitoes and Spitfires of the Photographic Reconnaissance Force are carrying out regular missions over Burma, Siam and also the Andamans, bringing back vital information for intelligence purposes.

The course of the war in the East will depend to a large extent on India's capacity and stability as a base. Today the Supreme Allied Commander in South-East Asia can plan future operations in the sure knowledge that his Allied Air C.-in-C. can provide whatever backing is required.

Assam and Bengal Squadrons Smite Japanese





BLASTING enemy-held roads, railways and bridges in Burma, the Eastern Air Command, with H.Q. at Calcutta, set up a new bombing record in December 1944. Air-Marshal W. A. Coryton, C.B., D.F.C. (1), commanding the 3rd Tactical Air Force, greets Maj.-Gen. H. C. Davidson (right), commanding the U.S.A. 10th Air Force on a Burma airfield. Hurricanes wreak havoc (2) near Paletwa in Arakan. Bound for Rangoon, a R.A.F. Liberator of the Strategic Air Force (3) is loaded with bombs. Maj.-Gen. G. E. Stratemeyer (4), Air Commander of the Eastern Air Command. Air-Commodore F. J. W. Mellersh, A.F.C., commanding the Strategic Air Force (5) holds a conference at his Bengal H.Q.

Photos, British, Indian, and U.S. Official

Armour Again Saves Our Fighting Men's Lives

Resourceful minds have been concentrated tirelessly on the modernization of ancient devices for securing protection for vital parts of the body, with the result that today our soldiers and airmen can be equipped with safeguards against injury in battle. How the cumbersome armour of the knight of old has been transformed to meet present needs is told by HARRIMAN DICKSON.

SOME of the most highly specialized types of armour used by British and American forces are produced by a London company which has been making chain mail and swords since the middle of the eighteenth century. Here one may meet men who have been at the business all their lives, and their fathers and grandfathers before them.

Take Mr. Lennard Barrat, for instance. A great deal of thought and research went into the production of the bullet-proof vest which has since saved hundreds of Allied airmen from death or serious injury. Each vest consisted of over 200 overlapping steel plates which would stop a revolver bullet at point-blank range. But there was one drawback. If the airman wanted to bale out, the 23 lb. of armour might cause disaster. It was imperative to find some way whereby the elaborate straps of the vest could be released rapidly and the whole thing jettisoned. That was were Mr. Barrat came in. He was responsible for devising the release mechanism which brings the whole process down to one simple pull on a red tab. Today an airman can free himself of the vest, and bale out, at high speed.

OTHER problems have been faced by skilled workmen in that factory for months before a solution has been discovered. At the very beginning of their investigations it was obvious to the experts that a suit of armour which would give complete protection against the high velocity modern missile was out of the question. They therefore concentrated on partial protection. It was found that in the last war no less than sixty per cent of casualties were due to chest or trunk wounds. Many armoured devices were then tried out to protect those parts of the human body, including a steel plate fitted to the back of the respirator box, and the steel vest now in extensive use today.

There also you may see some of the latest armour devices in production, in which women play a big part. Since many of the women came from the dress trade before the war, they handle the intricate strips of cotton canvas and magnesium steel with an adroitness born of long practice. Prominent amongst the factory workers is 83-year-old Tom Beasley, whose family has been in the trade for over two hundred years. Tom Beasley was the man who forged the beautiful Stalingrad sword (see illus. pages 495 and 499, Vol. 7).

The Germans have reported that some of our shock troops wear a light belt of armour which gives them good protection against machine-gun fire, and the German radio has talked about "bullet-proof uniforms." The astonishing thing about the latest types of armour used by British and U.S. troops is that they derive from that worn by Henry VIII.

THIS dip into history began when a Mr. Stephen Grancsay, U.S. historian and curator of the New York Museum of Art, heard that a group of experts were testing various armours at the ballistic testing ground, Aberdeen, Maryland. Mr. Grancsay knew a lot about the armour worn by the knights of old, and he began to consider ways of effecting improvements to meet modern war conditions. He set to work and in a very short time submitted a new type of armour which surprised the military experts. He then confessed that this armour was modelled on the lines of that once worn by no less a person than King Henry VIII. It was true, of course, that Mr. Grancsay used very different materials, but both the armour suit and helmet were certainly inspired by designs belonging to XVI century British history. The final product was composed of innumerable small steel plates, each connected to the other by minute springs and shock-cords.

TOM BEASLEY forging the famous Stalingrad sword at a London factory where "armour" is made for our troops, as told in this page.
Photo, Topical Press

Meanwhile, in Britain, Mr. Kenneth Walker, the surgeon, had carried out a number of similar experiments with new types of material, in the hope of finding something which was not only much lighter than steel but which had the same tensile strength. One such material is coir fibre. Then others were discovered and now several new plastic materials which have superseded steel in industrial production, are said to be very suitable for armour.

During the last war, Mr. Kenneth Walker served with the R.A.M.C., and was selected by Mr. Churchill to become "expert in armour to the Forces." In those days the steel helmet was still something of a novelty. Now every aspect of the armour problem has been thoroughly explored, and some of the results appear to be highly satisfactory.

BULLET-PROOF BODY ARMOUR is worn by certain branches of the U.S. armed forces. In France, a front-line bulldozer detail is so equipped (above). Pilots of the U.S.A.A.F. are also protected in this way (right).
Photos, Keystone, G.P.U.

Photos, British Official; British Newspaper Pool

In Flooded Holland Our Men Stand By

The British 2nd Army's front in Holland, between Nijmegen and Arnhem, was plunged under water early in December 1944, when the enemy breached the dykes. Meanwhile, on our right flank, Von Rundstedt—on December 16—launched his massive counter-offensive against the U.S. 1st Army threatening the Ruhr. A British light A.A. gun team (top) goes about its task in the downpour; (bottom) a cheerful party of Royal Engineers plug a sodden Dutch road with logs.

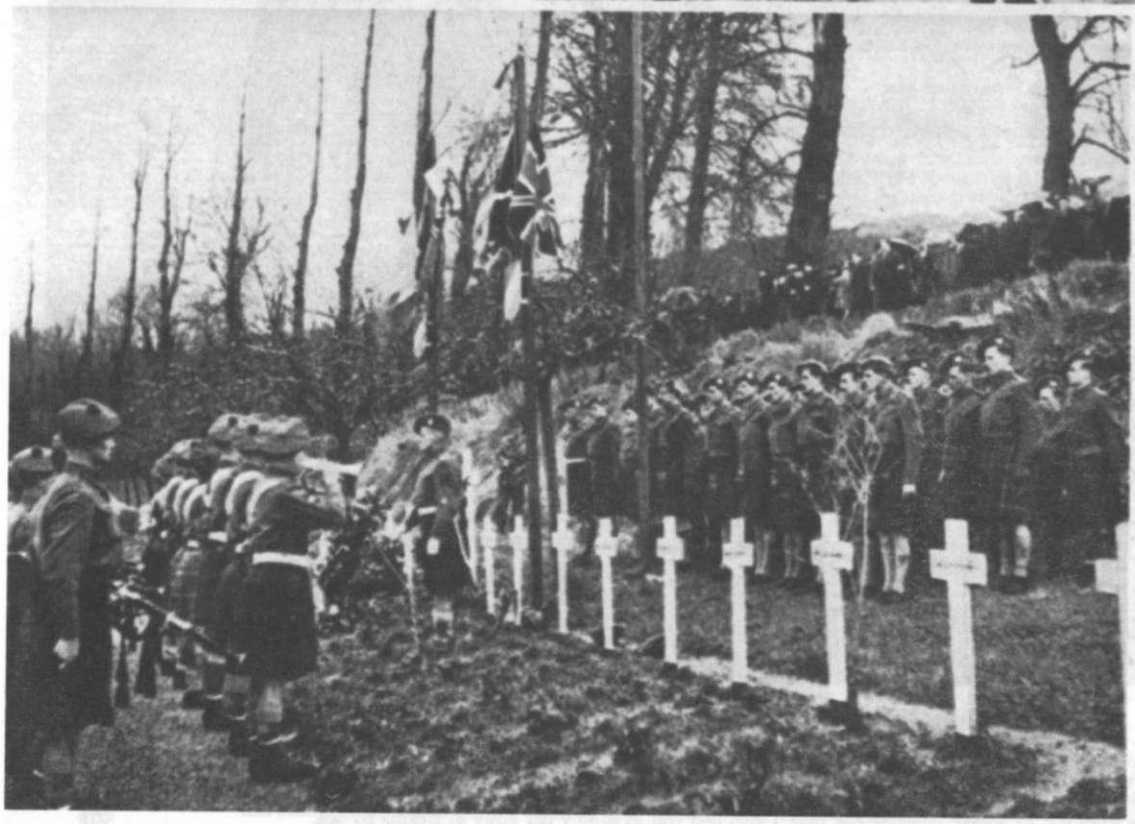
New British Pacific Fleet is Formed—

Among the most powerful battleships afloat, the 35,000 tons H.M.S. Howe, of the George V class (here seen closing an Egyptian felucca in the Suez Canal), will act as the flagship of Admiral Sir Bruce Fraser, G.C.B., K.B.E., Commander-in-Chief of the British Pacific Fleet, it was announced on December 12, 1944. Thus a strong new British fleet, based on Australia, has been established to operate in the Pacific, as well as an East Indies fleet under Vice-Admiral Sir Arthur Power, K.C.B.

Photo, Brit Official

—To Sweep Nippon Navy From the Seas

"We must get nearer to Japan," declared Admiral Fraser on arriving in Australia on December 12. He hoped that the first ship to enter the new Sydney graving dock—biggest in the southern hemisphere, and capable of taking the largest ships in the world—might be one of Britain's mightiest battleships. "The country with the greatest sea power must win the war—and we have it," he added, pointing out that Japan had still to supply her army in Burma by sea.



The 'Jocks' Return to St. Valery

Celebrating its three-months' freedom from the Nazi oppressor, the Normandy seaport of St. Valéry-en-Caux, on December 12, 1944, gave a lusty welcome to the famous 51st Highland Division—the men who had come back. In June 1940 after fighting a valiant rearguard action around the town (see pages 86–87, Vol. 3), the 51st were finally forced to surrender. Just over four years later men of the same division retook St. Valéry. Its liberation was marked by a day of ceremonies when officers and men of the Scottish Division were toasted at a banquet held in their honour. Followed a parade and a church service of thanksgiving to which the whole town gathered. Later, an impressive service was held in the cemetery and wreaths were laid on the graves of the men of the Division who fell in 1940. Headed by their pipes and drums, the "Jocks" (top) march to the church; (left) sounding the Last Post for the fallen. *Photos, British Official*

VIEWS & REVIEWS Of Vital War Books

by Hamilton Fyfe

THE mass of books about the Second Great War will be as dead in ten years' time as those about the First have been for a couple of decades. A few, a very few, will be still treasured because they are pervaded by personality—not for what the writer has to tell us, but for his way of telling it. I think one such book will be The Golden Carpet (Faber, 15/-) by Capt. Somerset de Chair, M.P. It tells the story of the rapid advance across the desert from Palestine to Iraq, which in 1941 stopped the Nazi-planned insurrection in Baghdad by capturing that city almost without a shot being fired. All this seems to be already ancient history. It may have been, as Captain de Chair claims, "one of the greatest marches" in the annals of war. "Never since the days of Alexander the Great had an army succeeded in crossing the desert from the shores of the Mediterranean to the banks of the Euphrates." That may be true enough, but probably it only makes the majority of folks yawn. Many people may not want to know how it was done any more than they yearn for meticulous details of the Syrian campaign—interesting as these may be—which the book covers also.

But if you pick up The Golden Carpet and open it anywhere and start reading, you will very soon find yourself tremendously interested, not in the campaign, but in a whole lot of people from generals to car-drivers, Arab interpreters, cipher clerks (who had to code and decode messages), and Bedouins who flicker in and out of the picture, looting as a rule, not amenable to any kind of discipline, but very useful at times. Capt. de Chair makes you see and hear all these people. They impressed themselves on his imagination so sharply that he is able to pass them on to us with vivid effect.

A Battle Won by Telephone

Perhaps at first you may wonder why he describes things in such close detail. It may even annoy you to read that a handkerchief lent to him had thin blue lines on it, or that he had sardines and biscuits for breakfast. But you will quickly discover that it is this photographic quality of the narrative which makes it grip, and gives every figure, every landscape, every scene a quality which you feel you are not going to forget.

One of the most dramatic incidents is the intercepting of the enemy's telephone in a building from which the Iraqis had been ejected so hastily that they had no time to destroy their installations. Capt. de Chair, who was Intelligence Officer to the expedition, did not speak Arabic (which seems to the non-military mind exceeding strange, seeing that his duties were entirely among Arabs), but he had a very useful native interpreter with him, whom he put on at once to converse with the Iraqis as if he were one of them. He received a warm welcome. "I've been trying to get you for two hours; what has been the matter?" asked a voice from the other end.

He quickly repeated this with his hand over the mouthpiece, and I said "Tell them that we are surrounded by the British, that the British have got tanks, and that the tanks are already across the floods. Reading (the interpreter) spoke to the distant operator in an admirably excited voice, laying horrified stress on the word Bababa—tanks. Consternation followed at the other end.

Before long word came that an Iraqi patrol had been sent out to locate the British tanks and had reported fifty of them! There were actually none at all in the whole area. But rumour once started soon created alarm. Later on, after Baghdad had been surrendered, an Iraqi officer, who had been through a course at the R.M.A., Woolwich, spoke perfect English, and knew the situation, political and military, from inside, told a war correspondent that the Iraqi army had to give in "because you British had fifty tanks there, and we had only two old anti-tank guns on that front." But whether Capt. de Chair's ingenious invention of a tank force was recognized as having contributed more than anything else to our victory does not appear.

WHEN it had at last been arranged for the British troops to march into Baghdad, it seemed to Capt. de Chair "of the first importance to capitalize the propaganda value of this romantic and in many ways spectacular achievement." He hoped the ceremonial entry would be filmed, so as to let the world know what this little British force had accomplished. General Kingstone—Commander of the British troops—said firmly "No." His refusal is attributed to "the inherent aversion to publicity of the professional British soldier." Another defect in far too many British officers is disinclination to follow a course that seems to them necessary, when the civil authority does not agree. The Foreign Office, for some reason never made clear, did not wish the British troops to enter the city at once, although everyone who knew anything about the Iraqis said there would be looting if they did not. There was no immediate occupation, and the looters had their way for a whole night.

Backstage Story of Iraqi Revolt

All who dared to defend their belongings were killed, while eight miles to the west waited the eager British force which could have prevented this. . . . Genius is a grasp of the essential and after victory the essential is to keep control of the situation.

BRIGADIER GLUBB PASHA, commandant of the Arab Legion, is here seen with Field-Marshal Sir Harold Alexander (extreme left) during an inspection of this famous corps in the Middle East. Its exploits are vividly described in the book reviewed above. *Photo. British Official*

CAPT. SOMERSET DE CHAIR, M.P., whose outspoken book describing in detail the campaign in Syria and the Iraqi revolt is reviewed in this page. *Photo, Elliott and Fry*

Genius was deplorably lacking at this juncture. There was a lack even of ordinary common sense. Worse than that revealed itself when the campaign against the French in Syria started. The advance on Palmyra, in which the author took part and was badly wounded, was expected to be a walk-over. Little air support was given to our men, and the enemy, in this case the French, had plenty of planes and used them murderously. After being wounded by a low-flying aircraft, Capt. de Chair was hit again while in the ambulance, although it had a huge Red Cross on it. The arrangement for disposing of casualties had completely broken down: Those who drew up the time-table of the advance ("silly time-table," Capt. de Chair calls it with complete justification) assumed that Palmyra would be taken at once and that all casualties could be sent there.

'A Worse Hell Than That of Crete'

"No one had stopped to wonder what would happen to the wounded if Palmyra did not fall on Day One." It held out till Day Thirteen, and while our troops were suffering a worse hell than that of Crete, "senior staff officers were saying behind the stout defences of their mahogany desks, 'We may have to send some aircraft up to Palmyra after all. Our chaps seem to be having a rough time of it.' And as they sipped their drinks in the bar they added, 'It is worrying about those casualties up there—not being able to get them back. We should have thought of Palmyra not falling. It is most annoying.'" (See page 55, Vol. 5).

But don't think the general tone of the book is bitter—or even critical. It is light-hearted, full of boyish humour, entertaining in a hundred different ways. The solemn account of the dinner at the British Embassy in Baghdad just after that night of horror I have mentioned, could not be bettered. From the drawing-room with its oil paintings, gilt furniture and soft carpets, to the dining room, "where the dinner-table was of polished shining mahogany in which the brightly silver and shaded candles were rosily reflected"—thence to the library for after-dinner bridge, all followed the routine of pre-war English upper-class existence. One can't help wondering if devotion to that routine has not perhaps something to do with—well, the sort of stupidity that led to the massacre in Baghdad.

How the Army's Amazing Bailey Bridge is Built

A revolution in military engineering has earned high praise from Field-Marshal Montgomery —a permanent way which can be assembled on the spot to span a river or gap and carry the weight of the heaviest tanks. Speed and simplicity are its keynotes. How a Bailey bridge can be erected in three hours by 40 men is explained below by T. S. DOUGLAS. See also p. 169.

A RETREATING enemy endeavours to burn his bridges behind him, and almost since the beginning of warfare the construction of emergency bridges has been a matter of prime consideration. In modern war a bridge has no longer simply to support the weight of marching infantrymen and of artillery. It has to carry the enormous lorries and massive tanks of a mechanized army.

It was the increasing weight of British tanks that early in this war led to the invention of the Bailey bridge, which has enabled us to pursue the German panzers during the last two years. The Germans have nothing like it.

FIRST of all, it is easily transportable. No special transport vehicles are required. Every part fits into a three-ton lorry, and a small group of these vehicles can move everything required for a complete bridge. The exact number of vehicles varies with the length and strength of the bridge that is to be erected. The way that length and strength can be varied is another advantage. Without supports or pontoons, the Bailey can span a gap of up to 240 ft. Using the supports of a bridge that has been destroyed, or pontoons, the bridge can cover almost any distance. The longest Bailey bridge so far constructed is believed to be the 1,200 ft. bridge over the Sangro River in Italy, a triumph of military engineering. The longest floating Bailey bridge (1,096 ft.) was thrown over the Chindwin in Burma in December 1944. The bridge can be constructed with single panels and single tiers so as to take moderately heavy traffic immediately. Additional panels and tiers, greatly increasing the load it will carry, can be added while it is actually being used. There is nothing to undo—you simply add.

There are other advantages. Two footways for infantry are carried outside the roadway, so that there is no confusion between foot and wheeled traffic. If the bridge is damaged by shells or bombs, the damaged section is easily removed and a new one inserted. Most of the bridge is built on the near shore where there is a certain amount of cover, and it can be built between banks of different levels. It is not surprising that Field-Marshal Montgomery said not long ago, "There is never enough Bailey bridging. This bridge is quite the best thing in that line we have ever had; it does everything we want!"

The principle of the bridge is simple. Standard parts are fitted together, largely by means of strong pins each weighing six pounds which in turn are held by split pins. The vital part is the lattice-work panel which is carried ready assembled, and in fact strongly welded. Six men can carry this part by special handles. These panels, locked together, support the roadway which is of wood and is assembled as the bridge is built. Road guides not only keep the traffic central but also hold down the standard wood pieces which form the roadway. The wooden footways are supported outside the panels.

It is the method of "launching" that makes the Bailey bridge so novel. Each 10-ft. section is built up on shore, complete with roadway, then pushed forward on special rollers, which are part of the equipment, almost to the point of balance. The next section is then added and the bridge pushed forward again. A false "nose" is fixed, and when this has crossed the gap it gives support while the final panels are completed; after which "nose" and rollers are removed so that the bridge can be locked in position.

Forty Men Can Construct a Bridge

There are only 17 parts used in making the bridge itself, and another nine in constructing the supports on which it rests. The tools required are of the simplest, but very ingenious. All these parts, with the necessary tools, are packed into standard lorries. The number of men used on construction varies, of course, with the size and speed required. But forty men can construct a complete bridge. In ideal conditions a short and single-tier bridge can be assembled in three to four hours, a little longer at night. But conditions are rarely ideal in war. One of the finest feats was the construction of a 300-ft. bridge over the Trigno in Italy within 36 hours of the bridge-head being cleared of enemy infantry. A remarkable feat was also performed on D-Day in Normandy, when engineers bridged the Caen Canal (see illus. p. 169) and the Orne River while under fire of every kind from the enemy. They had the advantage of having rehearsed the bridging again and again in Scotland.

One of the secrets of the bridge is precision in the manufacture of its parts, and the greatest credit is due to the firms and their employees who have turned out miles of Bailey bridging. When the bridge was approved, none of the factories normally undertaking this kind of work was available. All kinds of factories were enlisted to the task of production—some had been making greenhouses, window frames, bedsteads and even canoe paddles! The parts have to be exactly the right size, those vital holes that take the pins in exactly the right place, and all parts interchangeable. Just to make sure, every piece is tested by being built into a bridge before it leaves the factory. The test consists in constructing a continuous bridge, but in the factory as soon as it reaches "the other side" it is taken to pieces section by section.

MR. DONALD C. BAILEY, O.B.E., the designer of this bridge, is a civil engineer in the Ministry of Supply (see illus. p. 169). He was not a specialist in bridge construction when the call came for an improved military bridge, and is said to have sketched out the first designs on the back of an envelope while returning with other officials from an unsuccessful trial of a bridge in 1940. Every military invention has its "growing pains," but those of the Bailey bridge seem to have disappeared very quickly, and for once everyone was satisfied from their own special angle. By the end of 1943 engineers were actually averaging two Bailey bridges a day, and all the time the vast store of them required for D-Day was being built up.

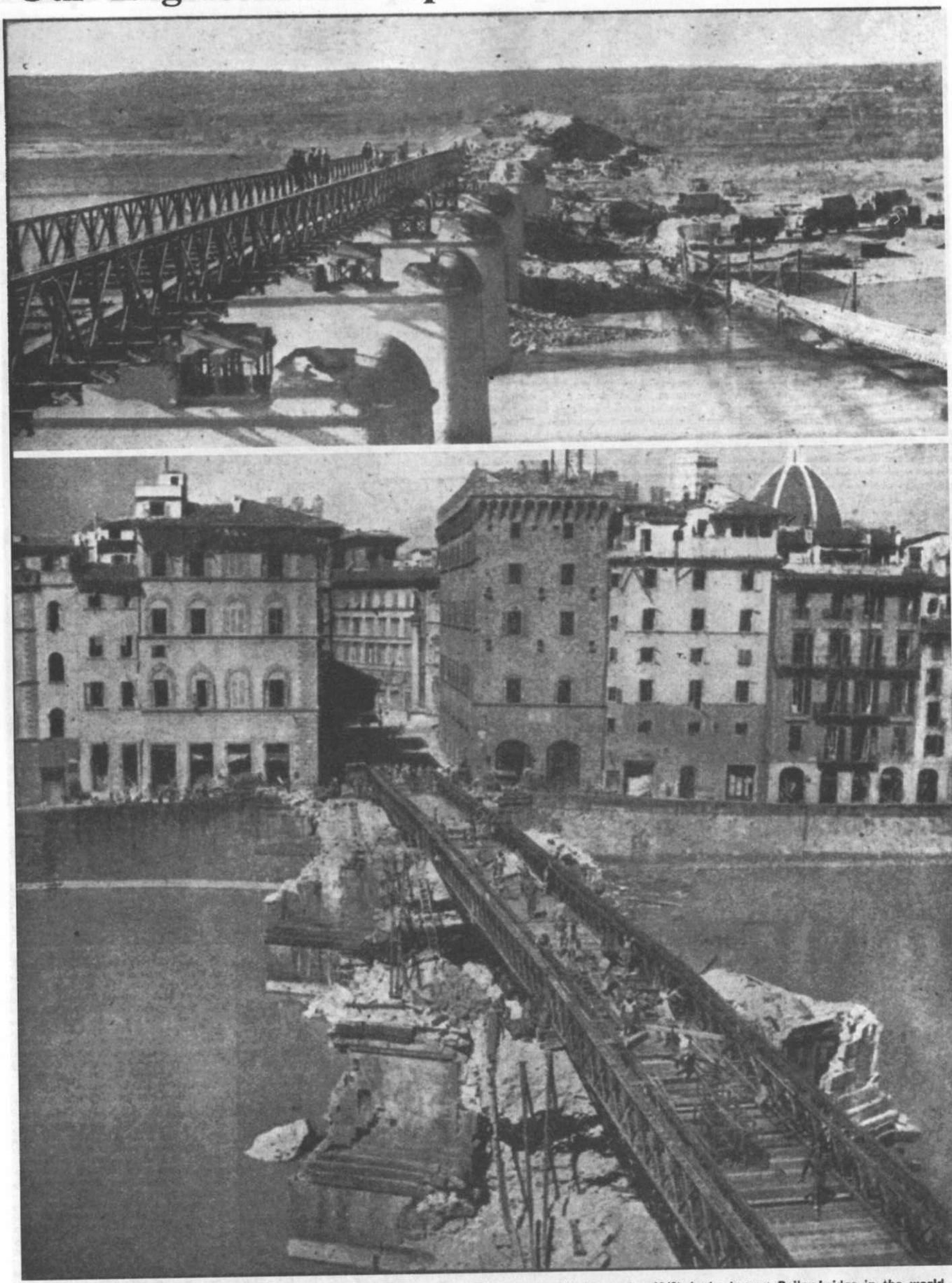
The Bailey bridge will cross any kind of gap, and although it goes up so quickly it is permanent. All the bridges, long and short, "easy" and difficult, have averaged 24 hours in construction. Some of the first are still in use, having carried hundreds of thousands of tons of traffic.

IN ITALY, during the winter campaign of 1944, as well as in France following the D-Day operations, the Bailey bridge literally paved the way to Allied victory.

Stacks of Bailey bridges in sections (above) lined the road to Ferrara after the fall of Ravenna to the 8th Army on December 5, where the enemy had systematically destroyed all river and canal crossings. British sappers—six men to each lattice-work panel—build up one of the last spans of a Bailey bridge (right) across the Caen canal in Normandy.

Photos, British Official

Our Engineers Triumph Over Sheer Destruction



TWELVE HUNDRED FEET ACROSS, and spanning the Sangro River in Italy (crossed in November 1943), is the largest Bailey bridge in the world, seen (top) while still under construction. Another noteworthy Bailey bridge strides the Arno (above) at Florence; it was erected on the piers of the former Ponte San Trinita (see illus. p. 227). Before the enemy quitted Florence on August 11, 1944, they systematically destroyed all the city's bridges except the world-famous Ponte Vecchio. *Photos, British Official*

London's Battle for Homes Reaches Its Peak

"HOUSING IS THE MOST THREATENED SECTOR on the home front," declared the Prime Minister on November 29, 1944. Eight days earlier the appointment had been announced of Mr. Duncan Sandys, M.P., as Minister of Works, in succession to Lord Portal. In a subsequent debate Mr. Sandys disclosed that the bomb-damaged houses in London alone totalled over 800,000 and that the cost of repairs undertaken up to December 7 amounted to well over £35,000,000. Over 200,000 men and women, he said, were engaged on London repairs, which had been granted a priority second only to urgent work of operational importance.

The new Minister further revealed that General Eisenhower had placed 3,000 U.S. sappers at the Government's disposal for the clearing of London bomb-sites and the building of temporary dwellings. While the pressed-steel bungalows—known as "Portals"—would not be produced till after the war he was considering calling for the manufacture of prefabricated houses from contractors who had built the invasion harbours (see pages 430–434.)

RE-HOUSING of London's bomb-victims proceeds apace. The Phoenix house (1), which is to replace the original Portal dwelling (see page 2), is still on the "secret list"; it contains a living-room, 2 bedrooms and a kitchen with a refrigerator. Steel-framed, this type is built largely of concrete and asbestos. The all-electric kitchen (2) is a feature of the new B.I.S.F. houses built on rolled-steel frames.

U.S. sappers took only 7 days to clear a bomb site and erect the first of many temporary dwellings (3) they are constructing in Lambeth; it is of the curved asbestos type. Just over a fortnight was taken to complete the first prefabricated semi-detached homes at Burnt Oak, Middlesex (4) which have both framework and window-frames of steel. In the badly-blitzed district of Poplar, in London's East End, single-storied houses built in the Midlands and brought south by lorry are being put up on bombed sites (5).

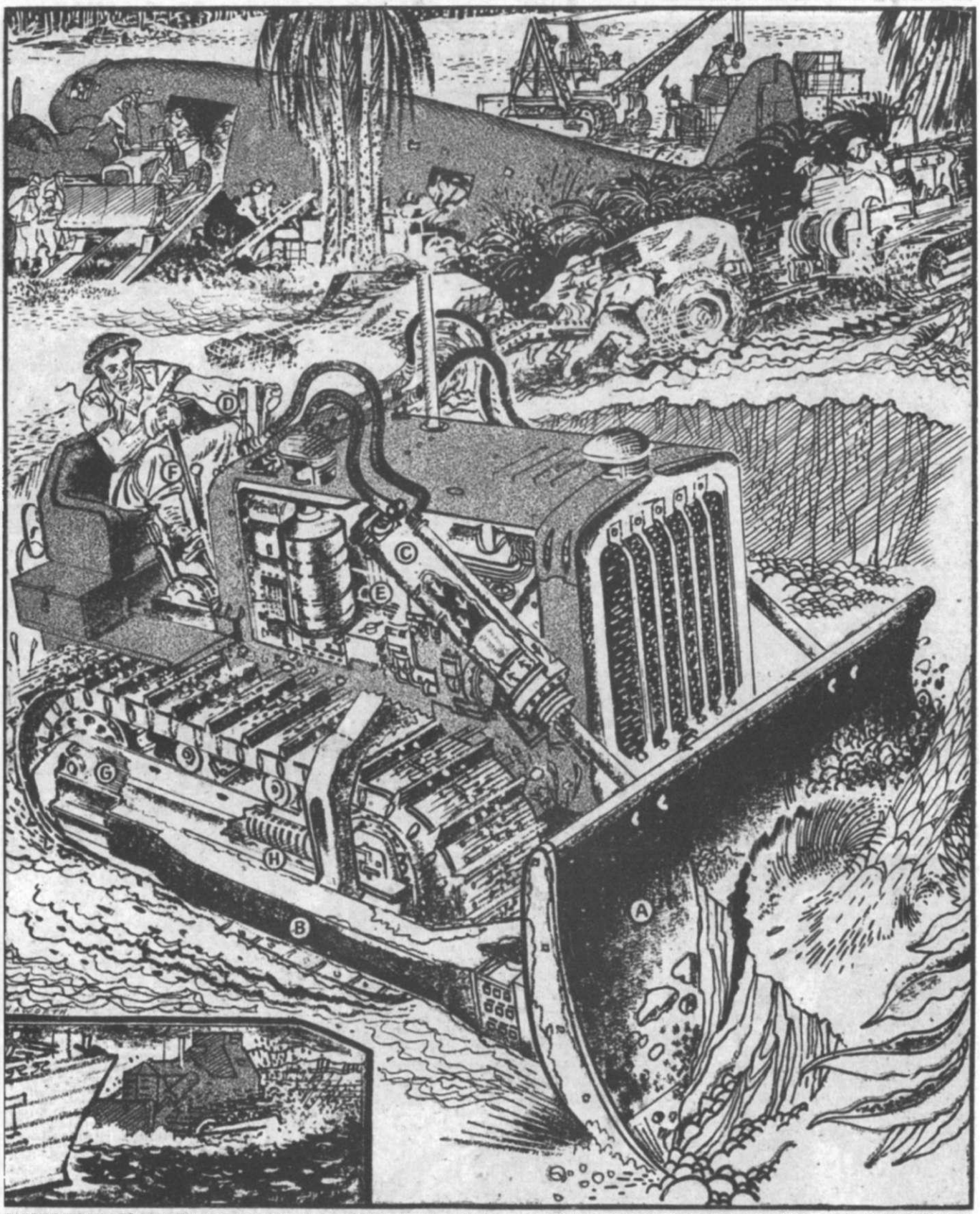
Photos, Sport & General, Planet News, Associated Press, Fox Photos

People of Britain Square Up To V-Bomb Terror

V-BOMBS HAVE FALLEN, and Britain's courageous and efficient Civil Defence organization goes swiftly into action. The beams of Army searchlights aid rescue-workers amid tottering masonry (1), besides helping the work of house-repairers (2) fitting temporary windows to bombed-blasted dwellings. When a large wall collapsed after a raid, burying rescue-workers and killing a N.F.S. boy-messenger, onlookers and would-be rescuers scrambled for safety as the wall crashed in a cloud of dust behind them (3). A bomb-victim, badly injured about the head and with his feet still pinned (4) was tended by a Light Rescue worker when flats in a working-class district were hit. Silence is called for on a bomb-site (5) while a R.A.F. police dog (see page 450) tracks down buried casualties among the rubble and wreckage. Under a new system of observer posts, Civil Defence services usually reach an "incident" in less than three minutes.

Photos, Daily Mirror, Keystone, Associated Press

Master of Most Jobs is the Wonderful Tractor



CATERPILLAR TRACTORS are capable of a greater variety of war-front tasks than any other single piece of mechanism. In the foreground (above) a bulldozer is seen cutting a road. Its huge scraper (A) can shift several hundred cubic yards of soil in an hour, break off or uproot massive trees, rip the undergrowth from tangled jungle or forest. The scraper is carried on stout metal arms (B), and can be raised by powerful rams (C) worked by small levers (D).

Power is supplied from a diesel engine (E) capable of 100 h.p. and more. There is no normal gearbox, the drive being through two separate clutches, one for each track, which can be engaged or slipped by means of the two track levers (F). The driving sprocket is at (G), and at the other end is the idler wheel. Between these is the track-tensioning spring (H) for keeping the track in adjustment.

In the left background is a small bulldozer ready for transport by air. On the right a tractor hauls a heavy gun and limber. A 45 h.p. tractor can haul up to 100 tons. Farther back a tractor fitted up as a crane is moving heavy stones.

Inset (bottom left) an armoured tractor is engaged in shallow water nosing out grounded barges and smoothing down sandbanks.

One of the most serviceable of all tracked vehicles is the "alligator," which won fame in the Walcheren landings in November 1944 (see pages 441 and 463-466). It resembles in appearance a last-war tank, but it floats. Cup-like treads move it through the water. Its official title is "Landing vehicle, tracked."

Specially drawn for THE WAR ILLUSTRATED *by Haworth*

I WAS THERE! Eye Witness Stories of the War

Tanks Ran Right Over the American Foxholes

When the Germans launched their counter-offensive in the Ardennes in the foggy weather of December 16, 1944, penetrations were made in the U.S. 1st Army front. Wes Gallagher, of the Associated Press, sent this dispatch from Belgium on December 20, telling of American heroism in the confused fighting that was then still in progress.

DOUGHBOYS slugging it out with Nazi tanks until they are ground to death in their foxholes—rescue in Western thriller fashion of nurses and wounded from a field hospital captured by the Germans—infantrymen trapped behind German lines picking their way back to their outfits—these are only a few of the tales of heroism in the First Army's bitter struggle to smash the West Front German counter-offensive, as I have seen it.

But it is not all a story of acts of cool bravery, as there are others of American formations cracking under the Nazi onslaught. It is a front of wild confusion as officers and men, trapped for several days behind German lines, smash through into the First Army side with titanic tales, only to be greeted with calm disapproval by tough doughboy veterans who now have succeeded in plugging the holes and stabilizing the front in this sector.

Sergeant Ronald Johnson of Creekside, Pennsylvania, stood beside me in a crowded casualty clearing station. He had just helped two wounded G.I.s over the mountain from behind German lines.

"When the attack started, artillery hit our company command post, killing everyone but myself and another fellow," he told me wearily, while at his feet a blood-stained G.I. with a bullet in his neck was slowly dying on a stretcher.

"The Germans came in and took us prisoner, but some of our boys attacked and we escaped in the woods. We made our way back to our units, or what's left of them. And the boys dug in again when we were attacked by those big German tanks. Some of those boys stood right in there fighting until the tanks ran right over their foxholes and smashed them. I got away again with two wounded boys, and by keeping to the woods was able to bring them over to the American lines. That's all I guess."

An American field hospital of which I was told was overrun by Nazi tanks and parachutists. The parachutists started loading nurses and wounded on trucks to be taken to Germany, when Lieutenant-Colonel Charles Horner of Doylestown, Pennsylvania, dashed into town in a jeep, followed by two half tracks, and started shooting from the hip and recaptured the base. The doughboys took over the town just in time to shoot up two jeep loads of Germans who raced into town in captured American cars, thinking their forces held it. Tanks appeared next and Yankees and tank destroyers slugged it out with the Nazis, who were on the receiving end for the first time in four days, until the town was firmly held again.

But this section of the front has been stabilized now, and the Germans are finding the going harder hour by hour.

AT PISTOL POINT, a German prisoner, survivor of a tank left burning by the roadside somewhere in the Ardennes, is marched to captivity by a U.S. sergeant. Accurate anti-tank fire from the U.S. 1st Army severely mauled Rundstedt's panzer drive into Belgium, which began on December 16, 1944. An account of American heroism is given in this page. *Photo, U.S. Official*

How We Captured a Member of the Gestapo

A surprise capture was made in Italy when a member of Himmler's Gestapo was brought in to our lines for interrogation. How this happened is told in the following narrative by Squadron-Leader Derek Adkins, who was serving with the Desert Air Force at the time.

IN all our successive moves from El Alamein across the arid wastes of the western desert, the more fertile country of Tripolitania, the olive and orange groves of Tunisia and Sicily, no more pleasant camp site had been found than the one we had at Lucera. It was in the heart of the Italian countryside, in the midst of a rich oak-tree plantation, with the Apennines looming in the distance, and from which you could occasionally hear the rumbling of gunfire. I must say that the sight of long-forgotten English trees, after the monotony of olive groves and vineyards and cactus plants, was just like a breath of Richmond Park!

The weather had been appalling, with a strong nor'-wester blowing up and down the straggling mountain passes so that one almost expected to see the miniature villages perched on the top of each summit blown away. For a week or more a fine rain had hung from the clouds like a thin transparent curtain, dancing through the valleys and across our aerodromes, slanting now this way, now that.

Cocksure—but Cornered!

I had been visiting the Wing Headquarters of some fighters of the South African Air Force when I was told that a German prisoner was being brought in for interrogation. The trailer that served as an office was cleared, and within a few minutes the prisoner arrived under escort. He was a typical Nazi, sullen and arrogant, broad-shouldered, with square-cut features and closely cropped hair. He answered every question at first in a cocksure manner that seemed to say, "You can't catch me!" But we knew rather more about his case than he thought.

It all began a year or two ago when a Croatian patriot, who was serving in a unit well behind the front line, had his name put down by the Germans as a "volunteer" for the Russian front. He soon realized that he was being watched by the Gestapo, but twice he contrived to make the German authorities believe that he was medically unfit. The first time he took large quantities

GERMAN SHOCK TROOPS push forward past blazing U.S. vehicles, including a jeep and a heavy half-tracked lorry, on the Western Front during the full-scale enemy drive into the American lines in December 1944. An eye witness story of the initial stages of this menacing German offensive is narrated above. *Photo, U.S. Official: from a captured German film*

of salt immediately before his medical examination, and another time feigned illness so successfully that his transfer was postponed.

Meanwhile, the Croat had been making plans to escape, but just before they were complete a member of the Gestapo arrived and placed him under arrest. Accompanied by some of his fellow countrymen he was going to be escorted to a German headquarters and placed in "protective custody."

The Tables Were Turned

The climax was reached after the party had set forth on the first stage of the journey. The Gestapo man was sitting happily with a bottle of wine to his lips, innocently thinking he was taking his victims to captivity. The Croat, however, had other ideas and by a carefully prepared ruse, which I can't disclose here, the tables were turned. The Gestapo gangster found himself on the way to Italy!

Of course he had a very plausible tale to tell. But his bewilderment at finding himself a prisoner was soon betrayed by a display of complete panic. After a short time in the office trailer this was replaced by a clumsy appearance of willingness to serve the Allied cause, coupled with the belated statement that he was really of Austrian origin.

But his bluff was called, and we were soon able to disprove his story by producing evidence that he had in fact assisted in some of the worst atrocities for which the Gestapo are renowned. The last I saw of him he was muttering "Ach! du lieber Gott!"

SUNBAKED AND SMILING, these troops of the Royal Scottish Fusiliers contemplate a useful array of rubber boats taken from the Japanese north of Mawlu in Burma. A curious story of a captured enemy supply dump is told in this page. *Photo, British Official*

Our Submarine's Fight with Nine Japanese Ships

Lieutenant-Commander E. P. Young, first R.N.V.R. officer to command a submarine, in a remarkable exploit off southern Burma took on seven Japanese supply ships and two escorts at once. In 36 minutes two escorts and one coastal vessel were sunk, two other vessels were damaged, and one M.T.B. was hit. Lieutenant-Commander Young tells his story here.

We surfaced and opened fire at the rear ship at a range of 2,000 yards, obtaining eight fairly destructive hits. She turned away and limped towards the shore. We then attacked and stopped the ship ahead of her, but both the escorts were now racing towards us, firing their machine-guns. I turned to port to bring them both on to the starboard bow, and directed the fire of all our guns on to them. In turn they were both hit and stopped by direct hits from the 3-in. gun.

This part of the action was most exciting, the range eventually closing to 400 yards. Both of these escorts were carrying Japanese, presumably troops. One of them released a depth charge when it was 500 yards away, which rocked the submarine. Then one of the escorts got out of control, and eventually drove itself under.

Meanwhile, an M.T.B. was sighted coming for us at great speed, so this was the next target to be engaged. She fired two stern torpedoes, the tracks passing about 100 yards astern of us. We scored a direct hit on the M.T.B. as she was retiring, and she took little further interest in the proceedings. And now some vessel had opened up with a pom-pom. We had not previously noticed this vessel, which was probably a motor gun boat. She got one direct hit, which struck our bridge casing but caused no casualties. There was a perpetual whine of machine-gun bullets, but it was difficult to see exactly which ships were firing.

It was now decided to finish off the coaster which had been stopped earlier—the second target engaged, and also the other escort. They both sank after a few short range water-line shots. Then fire was directed at another ship. Two direct hits were obtained and his bridge demolished.

By this time the barrel of our 3-in. gun was so heated that the next round jammed. Moreover the remainder of the convoy was getting out of range and we had exhausted all our Oerlikon and Vickers ammunition, and I was getting anxious about the navigation. I decided to call it a day, to avoid the risk of running the submarine aground.

LT.-COMMANDER E. P. YOUNG, D.S.O., a 29-year-old London publisher, and the first R.N.V.R. officer to be given command of a submarine, tells his story above.

Hot Burma Jungle Race for a £1,500,000 Store

When the victorious 14th Army was following up the Japanese retreat across the Chindwin it became known that the enemy had a vast supply dump east of the river. How an Allied fighting patrol raced through the jungle to capture this £1,500,000 store is told by Capt. R. F. Hearn.

An exhausting three-day trek took us over the last mountain range before the Chindwin, and we reached a village on the west bank opposite Settaw. The natives had no knowledge of the dump, but told us that there were some Japanese skulking around near Settaw.

There was no time to be lost, so I crossed the river with a fighting patrol to investigate. We went on for about three miles through the thick jungle, and found the dump. Piles of equipment were scattered around. There were brand-new assault and outboard motor boats, heaps of radio stores, seven 105-mm. guns still in their grease-proof wrappings, approximately one million rounds of all types of ammunition, mines and grenades. I got back across the river, and that night we heard that about 50 Japanese and many coolies were encamped near Settaw.

Early next morning we went over again. This time our fighting patrol had been swelled by a platoon of infantrymen. It was tricky country, and we moved cautiously. We had gone about a mile when our defensive screen bumped some Japanese, who made off into the jungle. It looked suspicious. Anticipating an ambush, we halted a while before going on. Behind us Lieut. Ensminver had rounded up a whole village to help move whatever stores we decided to take. He also brought along a small Royal Engineers party for demolishing the rest.

When we finished what we had to do, the sappers put explosive charges with five-minute fuses in each of the seven guns. Going back through the dump to the river, we set fire to the basha huts where the ammunition was stacked. Fourteen hours afterwards we could still hear them exploding. That night we recrossed the Chindwin, and were told that a large enemy force, transport and porters, were nearing their dump. They were welcome to what they found!

Stone Age Terrors I Saw in Devastated Russia

On a 600-mile journey through what was "guerilla" country when the Germans were in Byelorussia, Soviet war correspondent Boris Yampolsky was appalled by unforgettable sights. Now freed by the Red Army, industries are reviving, and guerillas are back at their old jobs. Yampolsky's story appears here by courtesy of Soviet War News.

For many years the Byelorussian people dug canals, built dams and bridges and drained the swamps. In place of whispering reeds, a sea of golden grain rippled in the wind. Then German airmen dropped incendiaries on the reclaimed boglands so that they burned day and night. Smoke rolled over the swamps, and from the sky ashes fell like rain. Ashes covered the ground, our faces, the horses.

We rode into a vast wilderness. The roads were overgrown with high grass and the fields with rank weeds. Black, burned villages, felled orchards—and in them, like tombstones, overturned beehives. Tall black crosses at the roadsides. While the Germans were still in Byelorussia I went on a journey through what had been the most thickly populated district of the Polessye region. For three days and nights I rode and saw not a single village, not a solitary house. I met only a boy tending a cow in a misty field, and a half-blind old woman who emerged from a hole in the ground at the sound of my horse's hoof-beats.

The hillocks bore graves with huge crosses adorned with wreaths of maple in autumnal yellow and red. You could see them from a long way off. I rode from hillock to hillock, from cross to cross. It was from the half-blind old woman that I first heard the fearful words: "round-up." The Germans had ringed the area and closed in from all sides. In one of the biggest villages of the Pinsk region all the people were burned in the church. In another all the children were burned in the school. In a third the people were burned on bonfires. In the fourth they were burned in their homes. S.S. men stood by and saw to it that nobody escaped through the windows.

I made these notes in a dugout tunnelled deep into a hill in the forest and camouflaged to tone with the face of the earth. It was only by sparks from the chimney that I found it. It was just as though I had found my way into a cave of the Stone Age. The tunnel ran deep beneath the roots of the trees. It was hard to tell how many people were there. Three tiers of bunks lined the walls at the entrance. In the depths people lay on the floor. When I entered, tommy-gun in hand, a woman screamed. The people's eyes were dim with the darkness, their senses mazed with the silence.

BYELORUSSIAN GIRLS, natives of Bialystok, welcomed their Red Army liberators with flowers in July 1944. See story in this and the preceding page. *Photo, Pictorial Press*

Sometimes a wolf crept up and glared into the den with green eyes. In swinging cradles were babies with wax-like faces. The sick peered out from bundles of rags and grimy sheepskins. I sat in the den until morning. There was no place to stretch my limbs. A girl at a spinning-wheel sat all night spinning a thread, unending as the people's woe.

Someone else was weaving bast shoes. An old man with a frostbitten face was sitting on the ground and slowly turning a handmill with wooden millstones. He ground hour after hour, all night long, day after day, to get flour for his bread. When I spoke to him of a windmill his eyes shone as he remembered the spreading sails that threw shadows across the field. To him it was like some fairy tale heard in childhood.

While the old man ground, an old woman pounded in a mortar. Thump, thump, thump. By midnight she had a few handfuls of millet. She poured it into water and put it on the fire. The fire here, just as in prehistoric times, burned always in the home. If it died, it was a great calamity. Fire must then be sought again.

Next morning I rode on through fields hazy in the autumn mist. Two peasant women were harnessed to a wooden harrow. Behind them followed a boy, barefoot, with a tray swinging on his chest, scattering seed. Thinking of that life in the hole in the earth, and gazing at the sower, I thought: That's what will happen to all the world, to all humanity, if the Nazi is not exterminated.

There was not a bed, not a chair, not a frying-pan or a bucket anywhere. For a hundred miles around you could have found neither needle nor knife. All had burned in the German fire. In Polessye they ate potato bread seasoned with potash—the fertilizer of the peat bog. They smoked birch leaves. I saw wooden knives, wooden needles, stone axes, just as if they had dropped from a book on ancient history.

The Germans thought: "All is burnt. The ashes will be scattered by the winds, and that's the end." Never were they more mistaken. The tenacious memory of the people cannot be burned by fire, slain by the knife, or strangled by the rope.

Not far from the River Sluch there was a burial mound raised by the people during the German occupation. A wooden cross bore the inscription: "The people's curse on the German murderers to all eternity. May the memory of those who died in agony be unfading." The Germans broke the cross and scattered the grave. The very next day, as though it had grown out of the earth, a new cross appeared, bearing the same epitaph. Towns will crumble to dust, rivers change their course, old roads will vanish, new ones appear, but never will those burial mounds entirely vanish.

OUR DIARY OF THE WAR

DECEMBER 20, Wednesday *1,936th day*

Western Front.—German penetration of 35 miles reached Laroche. Monschau, northern limit of German advance, recaptured by 1st Army troops.

Far East.—Tokyo bombed by small force of Super-Fortresses.

Pacific.—Royal Navy carrier-aircraft attacked harbour and oil installations on Sumatra.

DECEMBER 21, Thursday *1,937th day*

Western Front.—Stavelot and Malmedy recaptured from enemy.

Air.—R.A.F. Lancasters attacked Trier by day, and marshalling yards at Cologne and Bonn and oil plant near Stettin at night.

Far East.—China-based Super-Fortresses bombed aircraft works at Mukden.

DECEMBER 22, Friday *1,938th day*

Western Front.—German force which had encircled Bastogne reached St. Hubert, 35 miles from Sedan gap.

Sea.—E-boats attacking Allied convoy route off the Scheldt routed by British warships.

Far East.—Nagoya, Japan, again bombed by Super-Fortresses.

Hungary.—National Provisional Government set up by Hungarian National Assembly at Debreczen.

General.—British Government announced new army call-up to provide 250,000 more fighting men.

DECEMBER 23, Saturday *1,939th day*

Air.—Allied aircraft attacked Trier and marshalling yards at Ehrang and Kaiserslautern.

Burma.—British 36th Division, making deepest penetration yet, occupied Tigyiang, on Irrawaddy island.

Greece.—Fighting broke out between ELAS (Left-wing) and EDES (Right-wing) troops in north-west Greece.

Home Front.—V-bomb attacks on Northern England reported for first time.

DECEMBER 24, Sunday *1,940th day*

Western Front.—Enemy armour penetrated to Ciney and Celles, four miles from Dinant on the Meuse. With abandonment of American pocket round St. Vith, German salient was 40 miles wide at base.

Air.—More than 2,000 U.S. bombers and over 900 fighters attacked supply lines and airfields behind enemy front. Allied Tactical aircraft flew more than 6,000 sorties in attacks on enemy transport.

DECEMBER 25, Monday *1,941st day*

Air.—Roads, railways and bridges in Ardennes battle area attacked by Allied aircraft; 864 motor vehicles destroyed and 332 damaged.

Greece.—Mr. Churchill and Mr. Eden arrived in Athens by air.

India.—Japanese bombers shot down in small-scale attack on East Bengal.

DECEMBER 26, Tuesday *1,942nd day*

Western Front.—German columns driving on Meuse from Rochefort halted at Celles and Ciney.

Air.—Major force of R.A.F. bombers attacked German troops and supplies at advanced railhead of St. Vith.

Russian Front.—Red Army troops completed encirclement of Budapest.

Italy.—German attack on 5th Army front caused withdrawal from Barga in Serchio valley sector.

Greece.—Conference attended by delegates from all Greek parties opened in Athens under chairmanship of Archbishop Damaskinos.

Philippines.—Japanese warships driven off by air assault after shelling Allied positions on Mindoro.

Pacific.—U.S. warships and aircraft bombarded Iwojima in Volcano Islands.

DECEMBER 27, Wednesday *1,943rd day*

Western Front.—3rd Army troops broke through from south and relieved garrison of Bastogne after eight days' stand supplied by air.

Far East.—Tokyo again bombed by Super-Fortresses from Saipan.

Greece.—Conference in Athens adjourned after unanimous agreement in favour of Regency.

DECEMBER 28, Thursday *1,944th day*

Western Front.—Allied troops recaptured Echternach at south of German salient.

Air.—R.A.F. bombers attacked railway workshops and marshalling yards in Cologne area by day and Bonn and Munchen-Gladbach at night.

Pacific.—U.S. Liberators again attacked Iwojima, Volcano Islands.

DECEMBER 29, Friday *1,945th day*

Western Front.—U.S. troops began attack on Rochefort at westerly point of German bulge.

Air.—Allied bombers attacked marshalling yards at Bingen, Frankfurt and Aschaffenburg. R.A.F. bombed Coblenz and E-boat pens at Rotterdam.

Italy.—5th Army troops reoccupied Barga.

General.—Mr. Churchill and Mr. Eden returned to London from Athens.

DECEMBER 30, Saturday *1,946th day*

Air.—U.S. heavy bombers in great strength attacked marshalling yards at Kassel, Mannheim and Kaiserslautern.

Russian Front.—Germans rejected Russian surrender ultimatum at Budapest.

Pacific.—U.S. aircraft attacked targets in Palaus, Carolines and Wake Island.

Greece.—King George of Hellenes agreed to appointment of Archbishop Damaskinos as Regent.

General.—Hungarian Provisional Government declared war on Germany.

DECEMBER 31, Sunday *1,947th day*

Western Front.—Rochefort captured by Allied troops. Germans counter-attacked 3rd Army on Saar front.

Air.—Strong force of U.S. bombers attacked oil refineries, jet-plane factories, U-boat yards and railway bridges in N.W. Germany. Mosquitoes bombed Gestapo headquarters in Oslo by day and Berlin at night.

General.—Polish Committee of National Liberation at Lublin proclaimed itself Provisional Government of Poland.

JANUARY 1, 1945. Monday *1,948th day*

Western Front.—3rd Army attacked between Bastogne and St. Hubert.

Air.—Luftwaffe made many attacks on Allied airfields in Belgium and Holland; 364 German aircraft estimated destroyed by aircraft and guns. R.A.F. Lancasters breached Dortmund-Ems canal for fourth time. Day and night attacks by Allied bombers on oil plants and railway targets behind German front.

Burma.—Indian troops in Arakan occupied Rathedaung.

General.—France officially joined the United Nations.

JANUARY 2, Tuesday *1,949th day*

Air.—Daylight attacks by over 1,000 U.S. bombers on railways, bridges and troop concentrations. Night attacks by over 1,000 R.A.F. bombers on Nuremberg and Ludwigshafen.

Russian Front.—Fierce house-to-house fighting continued in Budapest.

General.—Admiral Sir Bertram Ramsay killed in air accident.

Flash-backs

1940

December 29. *Night fire raid on City of London; Guildhall and other famous buildings burned.*

1941

December 22. *Japanese launched major attack on Philippines.*

December 24. *Japanese captured Wake Island in the Pacific.*

December 25. *Hong Kong garrison surrendered to Japanese.*

December 30. *Kaluga, on Moscow front, recaptured by Russians.*

1942

January 2. *Manila and Cavite in Philippines taken by Japanese.*

December 24. *Admiral Darlan assassinated in Algiers.*

December 29. *Kotelnikovo S.W. of Stalingrad, captured by Russians.*

1943

January 1. *Veliki Luki, Nazi defence bastion, taken by Red Army.*

December 24. *General Eisenhower appointed Supreme Commander of Allied Expeditionary Force.*

THE WAR IN THE AIR

by **Capt. Norman Macmillan, M.C., A.F.C.**

WITH the island of Leyte securely in American hands, General MacArthur turned his attack upon Mindoro island, south of Luzon on which the Philippines capital, Manila, stands. The convoy conveying the American 6th Army troops from Leyte was attacked during each of the two days it steamed through the Mindanao Strait and the Sulu Sea, and 24 Japanese aircraft were shot down. The convoy was protected by cruisers, destroyers aircraft-carriers, and night fighters based on Leyte.

On December 14 the carriers of Admiral Halsey's U.S. Third Fleet attacked Japanese defence airfields. On the 15th 400 carrier-based planes swept over Luzon, 100 attacking Clark Field aerodrome, near Manila, as the Americans landed on Mindoro to capture the town of St. José and its adjacent airfield five miles inland. Their penetration took them seven to nine miles inland from a coastal beach-head nine miles across. With them was an airfield construction unit of the R.A.A.F., the first Australian ground forces to enter the Philippines campaign. Clark Field and Manila were again attacked by air over the Christmas week-end.

AT dawn on Saturday, December 16, Von Rundstedt attacked the U.S. front in Western Europe from north of Monschau to west of Trier, employing 20 divisions with two Panzer armies. The Luftwaffe appeared in its biggest concentration for many months. From dusk on Saturday until Sunday afternoon it was estimated that 500 enemy aircraft were in action, including jet-propelled fighters. The British 2nd Tactical Air Force assisted the American 9th Air Force, and Britain's latest Tempest fighters were in action, shooting down eight F.W. 190s and one Messerschmitt 262 "jet-job" without loss.

The purpose of the Luftwaffe was to assist the ground forces by laying strips of anti-personal fragmentation bombs in front of the German attack forces. The Germans employed V-weapons in the offensive, using flying bombs and rockets against rear areas behind the Allied lines, and "silver balls" in the forward areas. The shock of the attack forced the U.S. 1st Army into the first Allied retreat since the invasion of Normandy. On Sunday 17th, the enemy were reported to have put 1,000 single-engined fighters and fighter-bombers into the air over the Aix la Chapelle sector. By the following day two Groups of the British 2nd T.A.F. were flying wing to wing with the U.S.A. 9th A.F. But the fast Me. 262s frequently slipped silently down from the clouds to drop A.P. bombs, and then speed off. The enemy dropped parachute troops behind the American lines to spread confusion and effect demolitions.

While the American troops fought and retreated, the Allied heavy bombers were switched on to strategico-tactical bombing behind the enemy attack zone. The first group of targets included the vital railway centres in the great network of tracks that interlink this important German industrial area. More than 2,400 Allied aircraft (including a fighter escort of 600 Mustangs of the U.S.A. 8th A.F.) between early night of December 17 and dusk on December 18 bombed Ulm, Munich, Hanau, Munster, Duisburg, Cologne, Coblenz and Mainz in that order. All the aircraft operated from U.K. bases. Bomber Command attacked the first five targets, using more than 1,300 bombers and losing 17; 500 attacked Duisburg. The Americans lost three of their 500 bombers and five of the 600 fighters, shooting down three enemy fighters; they used a new type of fragmentation bomb weighing 265 lb., and dropped over 4,000 tons in one day.

WHILE the U.K. heavy bombers were diverted to tactical assaults, the U.S.A. 15th A.F. from Italy continued the strategic offensive against Germany's oil supplies. On December 17 and 18 they attacked Silesian oil refineries at Blechhammer, Odertal and Oswiecim. On the first day the enemy sent up from 120 to 155 interceptors to meet the force and in an air battle north of Brno, Czechoslovakia, 48 were shot down; the Americans that day lost 29 aircraft. On the second day enemy resistance was light.

On December 19 and 21 Bomber Command Lancasters, escorted by U.S.A. 9th A.F. attacked the communications centre of Trier, and 300 Fortresses attacked the railway and road junction from Trier north to Gemund, opposite the U.S. First Army front, on the first of those days.

APPALLING Weather Conditions Surmounted by U.K. Heavy Bombers

Still the German advance rolled on, and the U.S. 101st Airborne Division, equipped as ground forces, were encircled in Bastogne on December 20. This division dropped from the air on D-Day in Normandy and again dropped into action at Nijmegen. Now they were called upon to fight another isolated action from a different cause. Dakota transport aircraft began to drop supplies to them on December 23, and in four days 842 transports and more than 50 gliders flew in supplies in the largest-scale effort of its kind throughout the war; only one supply—of food—fell outside the held area, fortunately of larger extent than Arnhem, which probably accounts for the difference between the relative success of the two supply dropping operations. The 101st Division in Bastogne also possessed heavy tanks, which the Arnhem men did not. Their success, for they held out for seven days until relieved by forces of General Patton's 3rd Army, proves (as I suggested in a previous article, page 380) that means must be found to transport heavier equipment by air for future "Arnhems" if they are to succeed.

During most of the first week of the German offensive fog grounded the Allied tactical air forces, but the heavy bomber forces in the U.K. continued to operate whenever they could in the worst weather they had ever taken off in. Bomber Command and the 8th Air Force bombed enemy communications at Ehrang, Kaiserslautern, Coblenz, Bonn, Fulda, Gerelstein, Cologne, Saarbruecken, Aschaffenburg, Frankfort and Bingen. In addition, Bomber Command attacked Politz oil plant, near Stettin, (Dec. 21); troop concentrations and enemy armour at St. Vith (Dec. 26); and E- and R-boat pens at Ijmuiden (Dec. 15) and Rotterdam (Dec. 29) with 12,000 lb. bombs as counter to enemy opposition to Allied convoys sailing to Antwerp.

ON December 24 and 25 Allied sorties exceeded 10,000 for less than 1,000 by the Luftwaffe. On December 24 over 2,000 Fortresses and Liberators attacked escorted by over 900 Mustangs and Thunderbolts. No doubt Allied air power played an important part in blunting Rundstedt's attack—for by then nearly 3,000 enemy vehicles were destroyed and 1,250 damaged from the air—and before the end of December the German troops were forced back several miles, there to dig in, while the Allies took the initiative on the southern flank of the new salient.

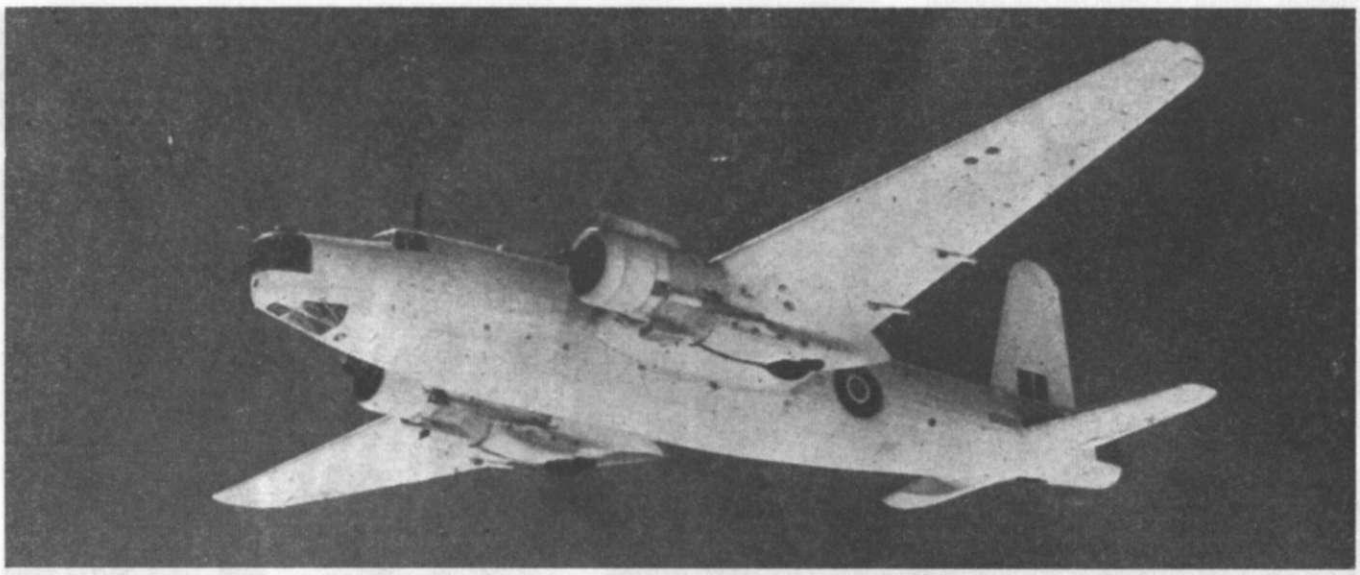
V-bombs fell in Northern England for the first time at the Christmas week-end; the Germans said London, Manchester and Antwerp were so attacked.

PARACHUTES CARRYING AMMUNITION AND FOOD drift down near Bastogne in the Ardennes from a U.S. Dakota transport, while a sky train with further supplies (top left) circles over the area. This photograph was taken just before the U.S. 3rd Army had broken through to the rescue of their comrades of the 101st Airborne Division in Bastogne (relieved on Dec. 28, 1944) who had been isolated by Rundstedt's counter-offensive of mid-December. *Photo, U.S. Official*

Premier Flies to Athens to Call Peace Parley

IN A DRAMATIC BID FOR PEACE, Mr. Churchill, accompanied by Mr. Eden, flew to Athens on Christmas Day 1944, and at once called a conference of the conflicting parties presided over by Archbishop Damaskinos, who was appointed Regent five days later. The Premier is assisted from his armoured car (1). Sappers remove explosives (2) found outside the British H.Q. The conference at work (3), before arrival of ELAS delegates. L. to r. Mr. Eden, Mr. Churchill, Archbishop Damaskinos, Field-Marshal Alexander, Mr. H. Macmillan, Gen. Scobie.

News from the Airways of the World at War



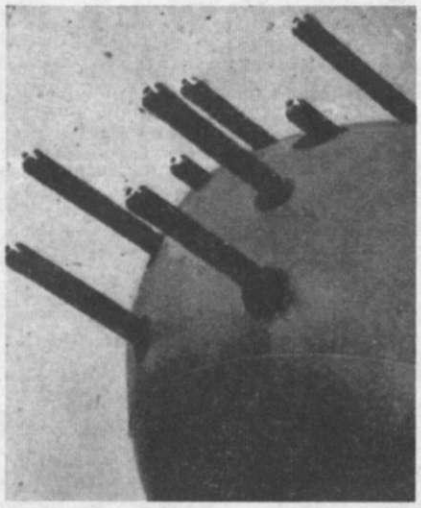
VICKERS-WARWICK, R.A.F. dual-purpose aircraft, has two 2,000 h.p. Double Wasp engines ; carries a motor lifeboat for rescue purposes ; and is armed with three multiple gun-turrets. See also illus. page 62.

AIRCRAFT have fought their own battles in the skies, carried constant war to the back areas and the deep seas, and taken part in almost every battle at sea, on land, and in combined operations. They have carried troops and supplies, equipped underground armies in enemy-occupied countries, and as ambulances have saved thousands of lives by transporting wounded swiftly from the battlefields. Without aircraft the assaults on the Pacific islands, on Sicily, Italy, Normandy and the French Riviera would have been far more costly, and in some cases perhaps impossible.

As the war has continued, the number and variety of aircraft used by the Fighting Powers have so increased as to make it impossible for anyone not specializing in the subject to keep really well-informed. The series of books entitled Aircraft of the Fighting Powers, of which the fifth annual volume (1944 Aircraft), edited by D. A. Russell, M.I.Mech.E., has just been issued (The Harborough Publishing Co. Ltd., one-and-a-half guineas) solves the problem for all who have been otherwise engaged, and at the same time provides a valuable work of reference for those who have been in close touch with aviation throughout the war.

PRODUCED on art paper, with photos and scale drawings, Vol. V. covers 24 American, 22 British, 10 German, eight Japanese, five Russian, and one Australian aircraft. These include heavy, medium and torpedo-dive-bombers, flying-boats, fighters, transports, tugs, gliders, photographic reconnaissance aircraft, prototypes, autogiros, a helicopter, and the V1 flying bomb. Technical details of engines, weights, armament, size, and performance (except when still secret) and a brief but fascinating history of each aircraft are given in the text.

When describing the Russian IL-3 two-seater Army attack aircraft the writers say, " The IL-3 is the two-seat version of the IL-2, the original Stormovik (not a type name but the Russian name for ground-attack and assault aircraft)." References like that give this book something of the touch of Dobson and Young (those incomparable popularizers by radio of good music).

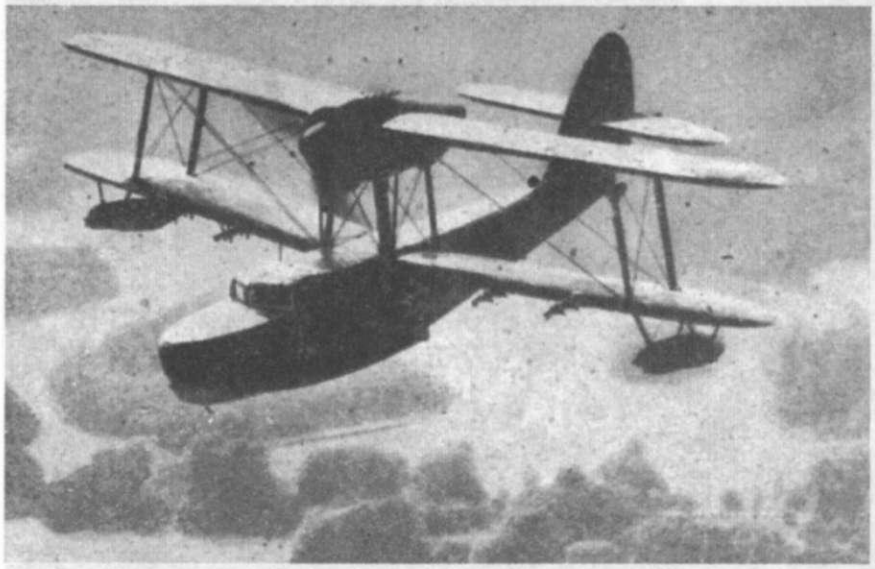


HEAVIEST ARMED AIRCRAFT is the B-25 Mitchell bomber, which carries 18 guns in all. Eight ·5-in. machine-guns jut from its nose.

A COMPENDIUM of aircraft designation systems, international aircraft markings and colour schemes, D-Day invasion markings, a colour plate reproducing the colour standards of the British Ministry of Aircraft Production—and, of course, the front, profile and plan drawings of aircraft are of particular interest to modellers and artists. The standard scale is 1/72, but, to fit the page size, 1/144 is used for exceptionally large aircraft, such as the Russian TB-7, the heavy bomber in which M. Molotov flew to Britain and the United States, and the German Me 323 which flew supplies to Tunisia in 1943.

One trifling thing I noticed. In page 50: Staraya Russa was spelt Staraya Russia. Wartime materials may be the reason, but I would like a heavier binding-case to stand up to the handling that this interesting volume is sure to receive.

NORMAN MACMILLAN.



VICKERS-ARMSTRONG SEA-OTTER MARK I, seen in flight, is a single-engined amphibian biplane designed for naval reconnaissance and air-sea rescue purposes. It has catapult equipment and is powered with a Bristol Mercury 30 engine of 870 h.p.; is armed with three Vickers " K " guns and carries a crew of three or four.

NORDEN BOMBSIGHT, here being uncovered by a U.S. bombardier, ensures pin-point bombing from any altitude and in most weathers.

Photos, British Official, Charles E. Brown, Keystone, Planet News

Editor's Postscript

FEW persons who have studied public opinion, as all journalists must do, have much use for the "polls," or widely-collected cross-sections of popular notions, which profess to show what the masses are thinking about public affairs. To begin with, only a very small proportion of the masses think at all, consecutively or logically, about matters beyond their own personal interest. They do not take the trouble to collect the facts and assemble the historical background which alone can provide a basis for rational judgement. Therefore their answers to questions put by the gatherers of opinions depend very largely on the manner in which those questions are phrased. We heard a great deal about the League of Nations Union Ballot in 1935, which showed a large majority in favour of stopping Mussolini's attack on Abyssinia. But nothing was done to stop it. People signed the ballot paper, but didn't really care. Indeed, many of them did not understand what they were signing. This was proved by a London daily paper which canvassed a district where the vote had been overwhelmingly against letting the Italians break the peace, and received an equally heavy poll in favour of doing nothing to restrain them ! Not much value need be attached therefore to the result of the same journal's well-intentioned endeavour to find out how long we want control and direction of labour to continue. "Not until Japan has been beaten" was the prevailing view, but I doubt if many of the "polled" could give reasons for it.

MANY useful changes that were turned down in peacetime have been adopted during war. It looked as if there might be a chance to run a short Bill through the House, giving Ministers who are members of the House of Lords the right to speak on the affairs of their Department in the Commons. That has often been mooted, and it is difficult to see any practical objection to it. But Mr. Churchill is a staunch believer in tradition—as he showed by his insistence that the House of Commons should be rebuilt on the lines of the one destroyed, inconvenient as it was in many ways. He cannot see any reason for not keeping peers who hold important offices in their own place and letting under-secretaries explain the views of their chiefs in the Lower House. In many Legislatures Ministers can speak in both Houses, and there are obvious advantages in the practice. One of them is that there would not be the same feeling in the Commons as there is now when Cabinet office is given to men who sit in the Upper House and cannot be questioned or argued with face-to-face by the representatives of the people.

THOSE who think of a National Park as merely a much bigger open space of the kind we are familiar with in towns, with their asphalt paths and trim hedges and well-kept grass, are entirely in error. National Parks are described in a paper circulated by the Committee which is busy even in war-time spreading the idea of them as "regions of our finest landscape brought into full public service—preserved in their natural beauty, continued in their farming use, and kept or made accessible (in so far as they are not cultivated) for open-air recreation and public enjoyment, and particularly for cross-country walking." In our small island such preservation is essential if we want the men who are fighting our battles all over the world, and their children, to be as proud of Beautiful Britain as their fathers were. We have allowed far too much of it to be smirched and uglified by ribbons of hideous little bungalows and tin shacks ; by scattered buildings of a squalid type such as deface the lovely South Coast and much of the Downland scenery ; by cheap and nasty additions to old farmhouses or labourers' cottages. To stop that in future everywhere, and not only in National Parks, is our plain duty to those who will come after us. National Parks would be at any rate a good start.

WHEN even the chairman of the Kennel Club calls the prices now being asked (and paid) for dogs "iniquitous," it is obvious that there is something like a ramp in the dog market. For puppies that used to cost two or three pounds, people are giving twenty or thirty. For a St. Bernard—if you should happen to fancy one, which I never did as a house companion, suitable enough though they are on a snowbound Swiss mountain—you would probably have to give £50. A dachshund will cost you £20, a Sealyham £15, and so on. This is not due to the number of dogs in Britain having diminished. There are just about as many as there were at the outbreak of war, although a great many were destroyed when rationing made it hard to feed dogs. The cause of the great rise in prices is apparently the increased demand for dogs of any and every kind. Even mongrels which used to be given away now fetch several pounds apiece.

IF it is true that letters from Marshal Pétain to Hitler and Hitler's answers to them have been discovered in a house where Pétain lived for a time, they will probably throw light on both men's characters. I can imagine, for instance, Pétain writing, "Dear Adolf, as you told me to call you, can you not let me have Laval liquidated ? He is such a nasty piece of work. He puts me off my food. And really he is not much use to you. I will not take his orders, yours respectfully, Marshal of France." To which the following reply is sent, "Marshal, Laval, I agree, is simply dirt. But dirt is useful in its place. Therefore, he will stay where he is—at your right hand, and you will do what he tells you, because I communicate my wishes to you through him. By the way, you should put Heil Hitler ! at the beginning and end of your letters to me. Heil ! to you from your affectionate Adolf."

Lieut.-Gen. COURTNEY H. HODGES, Commander of the U.S. 1st. Army, against which Von Rundstedt opened his violent counter-offensive on December 16, 1944.

Photo, Associated Press

A METROPOLITAN magistrate referred recently to "the epidemic of stealing" which broke out during the last war, continued more or less through the uneasy peace, and has become worse since 1939. At first it was heard of mainly among soldiers, but it has spread now to many other sections of the community. Here is one example. From the lavatory attached to the restaurant of one of London's big department stores some dozens of soap tablets and hundreds of towels have been stolen, with the result that the management has had put up a notice to say it cannot supply either. In another big shop everything purchased is tied with a special kind of tape. One customer who bought some small article and said "Never mind about tying it up ; it will go in my pocket" was told that it was the rule to put the tape round everything that had been paid for. If anyone was found in possession of something without the tape, that something had clearly been stolen.

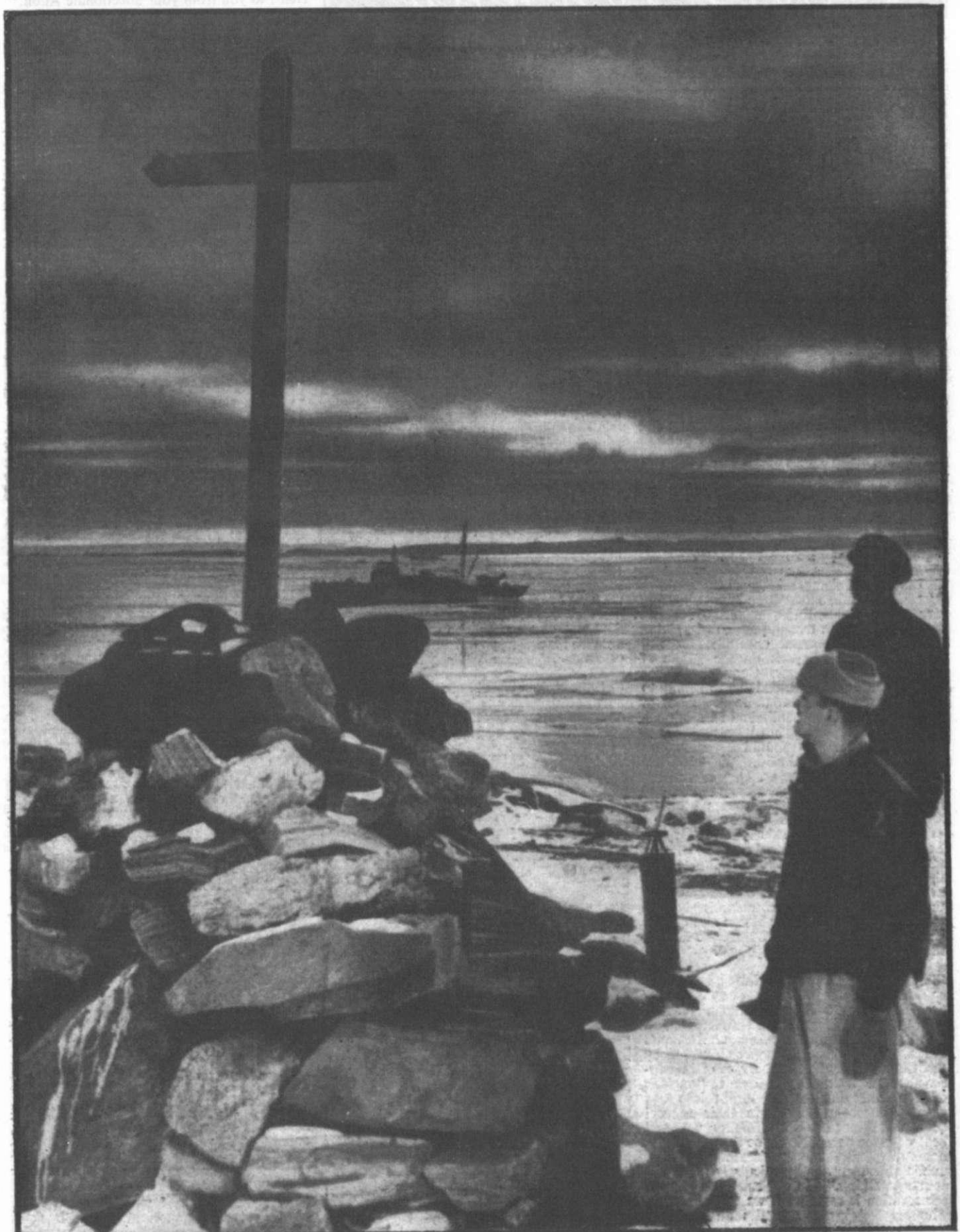
MY friends among the publishers have long had a stout champion in Stanley Unwin, himself a past President of the Publishers' Association and controlling more than one of our best-known London houses. Unwin has just sent me his newest outburst against the powers that be. It is a sixpenny pamphlet entitled "Publishing in Peace and War," in which he prances once again into the arena on his favourite hobby-horse—the meagreness of the paper ration for book-publishing which, despite the recent 2½ per cent increase, is still less than 22,000 tons a year. This may seen a lot—if you don't happen to know anything about publishing and until you reflect that the present ration for H.M. Stationery Office alone is 100,000 tons, while the newspapers have a quota of some 250,000 tons. It came as no surprise to learn that at least two-thirds of the total tonnage used for books in Britain goes in reprints of educational text-books and the classic writings of all ages, and that what we generally term fiction is merely the froth on the surface of the stream. Which is, of course, as it should be. An aggravating feature of the present situation is the fact that books are now selling in Britain to the lively tune of £18,000,000 a year, as compared with £10,000,000 pre-war, and yet the demand vastly outstrips the supply. Unwin contends that another 8,000 tons of paper a year on the publishers' ration would make all the difference. I wonder if, for once, he isn't being a bit too modest in his demands.

NONE of my friends has ever numbered among his desert island reading the "Agony" column of The Times. Yet a well-known social historian I know not only makes it his breakfast-time reading but card-indexes it for reference—as an invaluable and (he swears) infallible guide to the foibles and peculiarities of the strange age we live in. I wonder under what section of his card-index he classified the following advertisement:

ARTIST-SCIENTIST (Oxford). 33 languages, comparative philology, paints portraits from sitters or from photographs, undertakes all branches engineering, architectural design ; designs, executes wall, ceiling frescoes, furniture, sculpture ; undertakes all branches literary, scientific research (any language), physical chemical analysis, mathematical calculations, abstractions.

How many readers, I wonder, could name 33 languages without turning up a book of reference—let alone read and (presumably) write them ? Offhand, I can think of only 23, including Basque, the mystery language they speak in the Pyrenees which is said to have no affiliation with any other tongue in the world.

They Also Serve Who Guard the Arctic Seas



U.S. COAST GUARDSMEN IN GREENLAND keep lonely vigil among the grey Arctic wastes. The American protection of this vast island, some 850,000 sq. miles in area, dates back to April 11, 1941—eight months before the U.S. was at war with Germany—when President Roosevelt signed an agreement with the Danish Minister in Washington providing for the establishment of U.S. naval, military and air bases on Denmark's only colonial possession. A coastguard cutter is seen in the bay.

Photo, Paul Popper

Printed in England and published every alternate Friday by the Proprietors, THE AMALGAMATED PRESS, LTD., The Fleetway House, Farringdon Street, London, E.C.4. Registered for transmission by Canadian Magazine Post. Sole Agents for Australia and New Zealand: Messrs. Gordon & Gotch, Ltd.; and for South Africa: Central